

# **Guide to the Federal Reserve's Payments System Risk Policy**

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This publication is available at <http://www.federalreserve.gov/paymentsystems/psr/default.htm> or from the public information department at any Federal Reserve Bank.

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## **GLOSSARY**

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<sup>1</sup> Available at <http://www.federalreserve.gov/paymentsystems/psr/policy.pdf>

## Preface

The *Guide to the Federal Reserve's Payments System Risk Policy* (the *Guide*) was developed to assist depository institutions in complying with the Payments System Risk (PSR) policy of the Board of Governors of the Federal Reserve System (Board). The PSR policy was developed in order to control and reduce risks in the payments system and focuses particular attention on institutions' use of Federal Reserve intraday credit, commonly referred to as "daylight credit" or "daylight overdrafts."

The *Guide* contains detailed information on the steps necessary to comply with Section I of the PSR policy, which outlines the Federal Reserve's intraday credit policies. Any institution using Federal Reserve intraday credit, regardless of the amount, should have the capability to monitor its Federal Reserve account balance on an intraday basis and should understand the risks inherent in the provision of payment services generally.

Users of the *Guide* should be aware that the information it contains is based on the PSR policy effective at the time of publication. If the Board finds it necessary to modify the PSR policy, future policy statements will supersede information in the *Guide* until it can be updated accordingly.

## **I. Introduction**

The Federal Reserve Board developed the PSR policy to address the risks that payment systems present to the Federal Reserve Banks, to the banking system, and to other sectors of the economy. The Board's daylight credit policy objective is to attain an efficient balance among the costs and risks associated with the provision of Federal Reserve intraday credit, including the comprehensive costs and risks to the private sector of managing Federal Reserve account balances, and the benefits of intraday liquidity.

An integral component of the PSR policy is a program to control depository institutions' use of intraday Federal Reserve credit, or "daylight overdrafts," which is the primary focus of this document. A daylight overdraft occurs when a depository institution's Federal Reserve account is in a negative position at any point during the business day.

### **Policy History**

The Federal Reserve first published a policy statement on risks in large-dollar payment systems in 1985. This policy required all institutions incurring daylight overdrafts in their Federal Reserve accounts as a result of Fedwire funds transfers to establish a maximum limit, or net debit cap, on those overdrafts.<sup>2</sup>

In subsequent years, the Federal Reserve expanded the original PSR policy by addressing risk controls for other payment types including automated clearing house (ACH) transfers and book-entry securities transfers. The PSR policy also has been expanded to address risk controls for other payment systems including large-dollar multilateral netting systems and certain private securities clearing and settlement systems. In addition, the Federal Reserve made several modifications to the original PSR program that include reductions to net debit cap levels, the creation of an exempt status for institutions that incur only minimal daylight overdrafts, changes to the calculation of foreign banks' U.S. capital equivalency, and perhaps most notably, the implementation of daylight overdraft fees.

In 1989, the Board requested comment on a proposed policy change that would assess a fee of 60 basis points, phased in over three years, for an institution's average daily overdrafts in excess of a deductible of 10 percent of the institution's risk-based capital. In October 1992, the Board approved charging a fee for daylight overdrafts, which was to be phased in as 24 basis points in 1994, 48 basis points in 1995, and 60 basis points in 1996. The purpose of the fee was to induce behavior that would reduce risk and increase efficiency in the payments system. At the same time, to facilitate the pricing of daylight overdrafts, the Board modified its method of measuring daylight overdrafts to more closely

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<sup>2</sup> The Fedwire Funds Transfer System is a large-dollar electronic payment system owned and operated by the Federal Reserve Banks.

reflect the timing of transactions affecting an institution's intraday Federal Reserve account balance.<sup>3</sup> This measurement method incorporates specific account posting times for different types of transactions.

In March 1995, the Board decided to raise the daylight overdraft fee to 36 basis points instead of 48 basis points. Because aggregate daylight overdrafts fell approximately 40 percent after the initial introduction of fees, the Board was concerned that raising the fee to 48 basis points could produce undesirable market effects contrary to the objectives of the risk-control program. The Board believed, however, that an increase in the overdraft fee was needed to provide additional incentives for institutions to reduce overdrafts related to funds transfers. The Board stated it would evaluate further fee increases two years after it could assess the effects of the 1995 fee increase.

In 2000, recognizing its obligation to review fees and to consider changes that had occurred in the banking, payments, and regulatory environment, the Board conducted a broad review of the Federal Reserve's daylight credit policies. The Board evaluated its daylight credit policies and determined that these policies appeared to be generally effective in controlling risk to the Federal Reserve and in creating incentives for depository institutions to manage their intraday credit exposures. While the Board determined that the policy was generally effective, it identified growing liquidity pressures among certain payment system participants. Specifically, the Board learned that a small number of financially healthy institutions regularly found their net debit caps to be constraining, causing them to delay sending payments and, in some cases, to turn away business.

The Board's broad review of its daylight credit policies concluded in December 2001 with its approval of a policy that allows certain depository institutions to pledge collateral to their administrative Reserve Bank to secure daylight overdraft capacity in excess of their net debit caps, subject to Reserve Bank approval.<sup>4</sup> This policy also contained changes to the calculation of net debit caps for U.S. branches and agencies of foreign banks. These changes allowed certain foreign banks to access increased amounts of daylight credit.

### **Objectives of the PSR Policy**

The PSR policy has two major objectives. The first objective of the PSR policy is to manage and control Reserve Bank credit risk emanating from the Federal Reserve's involvement in the payments systems. The second objective of the PSR policy is to reduce systemic risk in the payments

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<sup>3</sup> Prior to the Board's modification of the daylight overdraft posting rules, Fedwire funds and government securities transfers were posted to institutions' Federal Reserve accounts as they were processed during the business day (as they still are today). The net of all automated clearinghouse (ACH) transactions was posted as if the transactions occurred at the opening of business, regardless of whether the net was a debit or credit balance. All other or "non-wire" activity was netted at the end of the business day, and if the net balance was a credit, the credit amount was added to the opening balance. If the net balance was a debit, the debit amount was deducted from the closing balance. Under this method, an institution could use all of its non-wire net credits to offset any Fedwire funds or government securities debits during the day but postpone the need to cover non-wire net debits until the close of the day.

<sup>4</sup> The administrative Reserve Bank is responsible for the administration of Federal Reserve credit, reserves, and risk management policies for a given depository institution or other legal entity.

system.

The Reserve Banks face heightened credit risk should depository institutions be unable to fund their daylight overdraft position in their Federal Reserve accounts before the end of the day. The Federal Reserve guarantees payment for Fedwire funds and book-entry securities transfers, Net Settlement Service (NSS) entries, and ACH credit originations made by account holders. If an institution were to fail after sending a funds transfer that left its account in an overdraft position, the Federal Reserve would be obligated to cover the payment and bear any resulting losses. The Federal Reserve's exposure in such instances can be significant. During 2001, depository institutions incurred daylight overdrafts in their Federal Reserve accounts totaling nearly \$100 billion per day.

The PSR policy allows Reserve Banks to control credit risk in three ways. First, depository institutions that access daylight credit must satisfy safety and soundness requirements. In general, depository institutions that do not meet safety and soundness requirements are not given access to daylight credit. This reduces the likelihood of an unhealthy depository institution being unable to meet its obligation to a Reserve Bank. Second, the PSR policy establishes limits on the amount of Federal Reserve daylight credit that a depository institution may use. These limits are sufficiently flexible to reflect the overall financial condition and operational capacity of each institution using Federal Reserve payment services. Third, the policy permits Reserve Banks to protect themselves from risk exposure of individual institutions through such measures as restricting account activity or imposing collateral requirements. In addition, the Federal Reserve charges fees for daylight overdrafts in order to provide a financial incentive for institutions to control their use of intraday Federal Reserve credit and to recognize explicitly the risks inherent in the provision of intraday credit.

The PSR policy also seeks to control systemic risk. In theory, systemic risk refers to the potential failure of one participant in a payment system to meet its required obligations, thereby potentially causing other participants or financial institutions to be unable to meet their obligations when due. Systemic risk has the potential to affect broader economic activity as well. In practice, the use of private settlement and payment systems introduces the risk that a failure of one participant in the system to settle its obligations when due could have credit or liquidity effects on participants that have not dealt with the defaulting participant. The need for such risk controls is becoming increasingly important in view of these systems' potential for growth and their high volumes.

The PSR policy addresses systemic risk arising from private settlement and payment systems. First, the policy requires multilateral settlement systems that meet certain conditions to identify and analyze their key risks and exposures and adopt risk-management measures commensurate with the nature and magnitude of the risks involved. Multilateral settlement arrangements that are not subject to the PSR policy are still encouraged to identify and address their risks. Second, private delivery-against-payment securities systems that settle on a net, same-day basis entail credit and liquidity risks for their participants and for the payments system in general. The Board believes that these systems should include risk-control features if they are to rely on Fedwire for ultimate settlement. Delivery-against-payment securities systems are expected to adopt appropriate liquidity and credit safeguards in order to ensure that settlement occurs in a timely fashion and that the participants do not face excessive



intraday risks.



## II. Daylight Overdraft Capacity

A daylight overdraft results when an institution has insufficient funds in its Federal Reserve account to cover its settlement obligations stemming from funds or book-entry securities transfers or from other payment activity processed by the Federal Reserve, such as check or ACH transactions. The Federal Reserve measures daylight overdrafts in depository institutions' Federal Reserve accounts to determine a depository institution's compliance with the PSR policy and to calculate daylight overdraft fees.

Under the Federal Reserve's PSR policy, each institution that maintains an account at a Federal Reserve Bank is assigned or may establish a net debit cap, which limits the amount of intraday Federal Reserve credit that the institution may use during a given interval. The policy allows financially healthy depository institutions that have regular access to the discount window to incur daylight overdrafts in their Federal Reserve accounts up to their individual net debit caps.<sup>5</sup> In addition, the policy allows certain institutions to pledge collateral to the Federal Reserve in order to access additional daylight overdraft capacity above their net debit caps. In these instances, the institution can incur daylight overdrafts up to the value of its net debit cap plus any Reserve Bank-approved collateralized credit.

This section discusses the steps involved in establishing a net debit cap, the process for applying for additional daylight overdraft capacity, the responsibilities of a depository institution's board of directors, the procedures for filing a net debit cap resolution, and the role of regulatory agencies. Institutions considered "special situations" should consult Section V of this manual for more information on net debit caps.<sup>6</sup>

### A. Net Debit Caps

An institution's net debit cap refers to the maximum dollar amount of uncollateralized daylight overdrafts that it may incur in its Federal Reserve account. An institution's cap category, or class, and its capital measure determine the dollar amount of its net debit cap.<sup>7</sup> An institution's net debit cap is calculated as its cap multiple times its capital measure:

$$\text{Net debit cap} = \text{Cap multiple} \times \text{Capital measure}$$

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<sup>5</sup> Institutions that have regular access to the discount window are those institutions that are eligible to borrow from the discount window under normal operating conditions.

<sup>6</sup> Institutions considered "special situations" include U.S. branches and agencies of foreign banks, nonbank banks, industrial banks, and institutions without regular access to the discount window.

<sup>7</sup> Information on capital measures for different types of institutions and related regulatory reports is provided in Appendix C.

Because an institution's net debit cap is a function of its capital measure, the dollar amount of the cap will vary over time as the institution's capital measure changes. An institution's cap category, however, normally does not change within a one-year period.

The policy defines six cap categories: high, above average, average, de minimis, exempt-from-filing, and zero. Each cap category is associated with a single-day and a two-week average cap multiple, as shown in Table II-1 below. Depending on its cap category, an institution may have two different cap multiples, one that applies to its maximum allowable overdraft on any day ("single-day cap"), and one that applies to the maximum allowable average of its peak daily overdrafts in a two-week period ("two-week average cap").

**Table II-1**  
Cap Multiple Matrix

Cap Category	Cap Multiples	
	Single-Day	Two-week Average
High	2.25	1.50
Above average	1.875	1.125
Average	1.125	0.75
De minimis	0.40	0.40
Exempt-from-filing*	\$10 million/0.20	\$10 million/0.20
Zero	0.0	0.0
* The net debit cap for the exempt-from-filing category is equal to the <b>lesser</b> of \$10 million or 0.20 multiplied by a capital measure.		

An institution is expected to avoid incurring daylight overdrafts that, on average over a two-week period, exceed its two-week average cap, and on any day, exceed its single-day cap. The two-week average cap provides flexibility, in recognition that fluctuations in payments can occur from day to day. The purpose of the single-day cap is to limit excessive daylight overdrafts on any day and to ensure that institutions develop internal controls that focus on the exposures each day, as well as over time. The same cap multiple applies to both the single-day peak overdraft and the average peak overdraft for a two-week period for institutions in the de minimis, exempt-from-filing, and zero cap categories.

## **B. Cap Categories**

An institution can establish a cap category by submitting to its Reserve Bank at least once a year a copy of its board-of-directors resolution, or it can be assigned a cap category by its Reserve Bank. Generally, only those institutions that regularly incur daylight overdrafts of more than \$10 million or 20 percent of their capital measure on a single-day or two-week average basis are required to file an annual board-of-directors cap resolution. Institutions that do not file cap resolutions are assigned either an exempt-from-filing or a zero cap category. The Reserve Bank will notify the institution if it qualifies for an exempt-from-filing cap. If an institution has any questions regarding its cap, the institution should contact its Reserve Bank.

### *Self-assessed*

In order to establish an average, above average, or high cap category, an institution must perform a self-assessment of its creditworthiness; intraday funds management and controls; customer credit policies and controls; and operating controls and contingency procedures. The results of the self-assessment should indicate the appropriate cap category for the institution.

The institution's (or its holding company's) board of directors should review and approve the results of the completed self-assessment. The directors' approval must be communicated to the Reserve Bank by submission of a board-of-directors' resolution (Appendix B provides a sample resolution). The Reserve Bank will review the cap resolution for appropriateness, in conjunction with the institution's primary regulator. Should the Reserve Bank determine that the cap resolution is not appropriate, it will advise the institution to reevaluate the self-assessment and submit another resolution. The self-assessment process and the board-of-directors review should be conducted at least on an annual basis.

An institution that experiences a significant change in its financial condition or organizational structure, such as a merger, acquisition, large charge-off, or increase in loan loss reserves, is required to review its current cap category with particular focus on creditworthiness standards. A resolution to establish a different cap category may be submitted by the institution, or may be required by the Reserve Bank, before the annual renewal date if circumstances warrant such a change.

Details of the self-assessment process are provided in Section VI and Appendix A of this manual. Other institutions, such as those in the zero, exempt-from-filing, or the de minimis cap categories, may also find it helpful to review certain sections of the self-assessment procedures, which contain information on evaluating the effectiveness of controls over payments processing.

### *De minimis*

Depository institutions that incur daylight overdrafts up to 40 percent of their capital measure may qualify for a de minimis net debit cap. To ease the burden of performing a self-assessment for these institutions, the PSR policy allows a financially healthy institution to incur daylight overdrafts up to 40 percent of its capital measure if the institution submits a board-of-directors resolution. An institution with a de minimis cap must submit to its Reserve Bank at least annually a copy of its board-

of-directors resolution (or a resolution by its holding company's board) approving the depository institution's use of daylight credit up to the de minimis level. If an institution with a de minimis cap exceeds its cap during a two-week reserve-maintenance period, its Reserve Bank will counsel the institution and decide whether the de minimis cap should be maintained or the institution will be required to perform a self-assessment for a higher cap.

### *Exempt-from-filing*

The exempt-from-filing category permits depository institutions to incur daylight overdrafts up to the lesser of \$10 million or 20 percent of their capital measure. The exempt-from-filing cap is granted at the discretion of the Reserve Bank. If a Reserve Bank determines that an institution is eligible for exempt status, it will assign this category without requiring any additional documentation. As a result, the exempt-from-filing cap category substantially reduces the administrative burden associated with obtaining a net debit cap. The majority of depository institutions that hold Federal Reserve accounts are in the exempt-from-filing category.

To be eligible for the exempt-from-filing cap category, an institution must be in healthy financial condition and should use only minimal amounts of Federal Reserve daylight credit. Specifically, an institution's daylight overdraft history should show only rare overdrafts of more than \$10 million or 20 percent of its capital measure, whichever amount is smaller. Any overdrafts above this limit should occur no more than twice in a four-week period (two consecutive two-week reserve maintenance periods). An institution may contact its Reserve Bank for verification that it has been granted or is eligible for the exempt status.

A depository institution with a new Federal Reserve account may be eligible for exempt status if it is considered to be in healthy financial condition. Furthermore, if an institution with an exempt-from-filing cap category later determines that it requires more daylight overdraft capacity, it may file a cap resolution for a higher net debit cap. Institutions in the exempt-from-filing cap category are not required to renew their caps annually. Reserve Banks will monitor the financial condition of institutions to ensure they continue to qualify for the exempt-from-filing net debit cap.

### *Zero*

An institution with a net debit cap of zero may not incur daylight overdrafts in its Federal Reserve account. Some institutions have established management policies that prohibit daylight overdrafts. Such institutions may adopt a voluntary zero cap, but are not necessarily required to do so by Federal Reserve policy. An institution may adopt a zero cap by sending a letter to its Reserve Bank. The zero cap will remain in effect until the institution files a cap resolution for a different cap category or until the institution requests an exempt-from-filing cap.

In other cases, a Reserve Bank may assign an institution a zero cap. Institutions that may pose special risks to the Federal Reserve, such as those without regular access to the discount window, those incurring daylight overdrafts in violation of the Federal Reserve's PSR policy, or those in weak financial condition, are generally assigned a zero cap. Recently-chartered institutions may also be assigned a zero cap. An institution that has been assigned a zero cap as a result of recurring daylight

overdrafts in excess of its cap may generally file a resolution for a higher cap if the institution is considered to be in healthy financial condition. An institution with a zero cap should confirm its eligibility for a positive cap with the Reserve Bank before proceeding to obtain approval from its board of directors for a de minimis cap or before applying for a self-assessed cap.

### **C. Additional Daylight Overdraft Capacity**

The PSR policy recognizes that while net debit caps provide sufficient liquidity to most institutions, some institutions may still experience liquidity pressures. To relieve these pressures, institutions with self-assessed net debit caps may pledge collateral to the Federal Reserve to secure daylight overdraft capacity in excess of their net debit caps, subject to Reserve Bank approval.<sup>8</sup> This policy is intended to provide some additional liquidity to the few institutions that might otherwise be constrained by their net debit caps, while allowing the Federal Reserve to protect the public sector from additional credit risk. Depository institutions that request daylight overdraft capacity beyond their net debit caps must have already explored other alternatives to address their increased liquidity needs.<sup>9</sup> Institutions with self-assessed net debit caps should consult with their local Reserve Bank regarding requests for additional, collateralized capacity. Institutions have some flexibility as to the specific types of collateral they may pledge to the Reserve Banks; however, all collateral must be acceptable to the Reserve Banks. Institutions are expected to submit the following information when requesting collateralized capacity:

- The amount of daylight overdraft capacity requested.
- Written justification for requesting additional daylight overdraft capacity.
- A principal contact at the depository institution.

In reviewing an institution's request for additional collateralized daylight overdraft capacity, the Reserve Bank will consider the institution's reasons for applying for additional capacity, the institution's financial condition, and other information, as applicable. In order to be approved for additional daylight overdraft capacity, the institution must file a board-of-directors resolution for the maximum daylight overdraft capacity.<sup>10, 11</sup> Institutions that hold a zero, exempt-from-filing, or de

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<sup>8</sup> The maximum daylight overdraft capacity for an institution approved for collateralized capacity is equal to the institution's net debit cap plus its Reserve Bank-approved collateralized credit.

<sup>9</sup> Some potential alternatives available to a depository institution to address increased intraday credit needs include (1) filing for a higher net debit cap, (2) shifting funding patterns or delaying the origination of funds transfers, or (3) transferring some payments processing business to a correspondent bank.

<sup>10</sup> A foreign banking organization (FBO) should undergo the same process as a domestic bank in applying for additional daylight overdraft capacity for its U.S. branches and agencies. Many FBOs, however, do not have the same management structure as U.S. depository institutions, and adjustments should be made as appropriate. If an FBO's board of directors has a more limited role to play in the bank's management than a U.S. board has, the collateralized capacity request should be reviewed by senior management at the FBO's head office that exercises authority over the FBO equivalent to the authority exercised by a board of directors over a U.S. depository institution. In cases in which the board of directors exercises authority equivalent to that of a U.S. board, the request for additional daylight overdraft capacity should be reviewed by the board of directors.

minimis net debit cap are not eligible to apply for collateralized capacity in excess on their net debit cap.

A self-assessed institution that has been approved for additional collateralized capacity should avoid incurring peak daylight overdrafts that, on average over a two-week period, exceed its two-week average limit, and, on any day, exceed its single-day limit. The single-day limit is equal to an institution's net debit cap plus the amount of applicable Reserve Bank-approved collateral. The two-week average limit is equal to the two-week average cap plus the amount of applicable Reserve Bank-approved collateral, averaged over a two-week reserve-maintenance period. Because of the way the Federal Reserve's systems operate, a self-assessed depository institution that has been approved for additional collateralized capacity may, at any time, pledge more or less collateral than its Reserve Bank-approved collateral limit.<sup>12</sup> Applicable collateral to be used in the calculation of an institution's single-day and two-week average limit will be less than or equal to the amount of collateral approved by the Reserve Bank.

#### **D. Role of an Institution's Board of Directors**

The Federal Reserve expects the board of directors of a depository institution to establish and implement policies to ensure that its management follows safe and sound operating practices, complies with applicable banking laws, and prudently manages financial risks. Given these responsibilities, the directors play a vital role in the Federal Reserve's efforts to reduce risks within the payment system.

As part of the PSR policy, the Federal Reserve requests that an institution's board of directors, at a minimum, undertake the following responsibilities:

- Understand the depository institution's practices and controls regarding the risks assumed when processing transactions for its own account and the accounts of its customers or respondents;
- Establish prudent limits on the daylight overdrafts that the institution incurs in its Federal Reserve account and on privately-operated clearing and settlement systems; and
- Periodically review the frequency and dollar levels of daylight overdrafts to ensure that the institution operates within the guidelines established by its board of directors. Directors should be aware that, under the Federal Reserve's PSR policy, repeated policy violations could lead to reductions in the institution's daylight overdraft capacity, as well as the imposition of restrictions on its Federal Reserve account activity that could affect the institution's operations.

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<sup>11</sup> Model resolutions are provided in Appendix B. A depository institution may revise its request for additional collateralized daylight overdraft capacity at any time, provided there is sufficient justification for doing so.

<sup>12</sup> Please see Section I.D. of the *Federal Reserve's Policy Statement on Payments System Risk* provided in Appendix E for additional information on Collateral.



The directors may appoint a committee of directors to focus on the institution's participation in payment systems and its use of daylight credit. Furthermore, a higher level board of directors of the same corporate family may conduct a self-assessment review and approve a resolution. For example, the board of directors of the parent company of a bank holding company may review the self-assessment and request a net debit cap for one or more of its banking subsidiaries. The board of directors should be aware that delegating the review process to a committee or higher level board does not absolve the directors from the responsibilities outlined in the Federal Reserve's PSR policy. The directors may not delegate this responsibility to an outside consultant or third-party service provider.

For institutions requesting daylight overdraft capacity above their net debit caps, the board of directors must understand the reasons the institution is requesting additional daylight overdraft capacity, the amount of the collateralized capacity, and the total amount of the net debit cap plus Reserve Bank-approved collateralized credit.

The Federal Reserve recognizes that the boards of directors of U.S. branches and agencies of foreign banks do not necessarily serve in the same capacity as boards of directors of depository institutions in the United States. Therefore, individuals who are responsible for formulating policy at the foreign bank's head office may substitute for the board of directors in performing the responsibilities specified in the PSR policy.

## **E. Cap Resolutions**

The policy requires a board-of-directors resolution to establish a cap in the de minimis or self-assessed (average, above average, or high) cap categories. In addition, self-assessed institutions that wish to obtain collateralized capacity above their net debit caps must submit a resolution. These resolutions must follow a prescribed format. Specifically, resolutions must include the following: (1) the official name of the institution; (2) the city and state in which the institution is located; (3) the date the board acted; (4) the cap category adopted; (5) the appropriate official signature; (6) the ABA routing number of the institution; and, (7) if applicable, the institution's corporate seal. For a board resolution approving the results of a self-assessment, the resolution must identify the ratings assigned to each of the four components of the self-assessment as well as the overall rating used to determine the actual net debit cap. In addition, the institution should indicate if it did not use the Creditworthiness Matrix approach in determining its creditworthiness rating (Appendix B provides sample resolutions).

A depository institution's primary supervisor may review the resolutions, and any information or materials used by the institution's directors in fulfilling their responsibilities under the PSR policy must be made available to the institution's supervisory examiners. Supporting documentation used in determining an appropriate cap category must be maintained at the institution. At a minimum, the institution's "cap resolution file" must contain:

- An executed copy of the resolution adopting the net debit cap or collateralized capacity;

- For institutions with self-assessed caps, copies of management's self-assessment of creditworthiness, intraday funds management and control, customer credit policies and controls, and operating controls and contingency procedures;
- Minutes and other documentation that serve as a formal record of any discussions regarding the self-assessment or the request for collateralized capacity by the directors;
- Status reports made available to the board of directors regarding the depository institution's compliance with resolutions adopted by the directors as well as with the PSR policy;
- Other materials that provide insight into the directors' involvement in carrying out their responsibilities under the PSR policy, including special studies or presentations made to the directors;
- For the collateralized capacity resolution, the amount of collateral pledged and the maximum daylight overdraft capacity amount; and
- If pledging securities in transit for additional daylight overdraft capacity, the resolution for securities in transit collateralized capacity should indicate the amount of pledged securities in transit and the amount of other collateral pledged, if applicable.<sup>13</sup>

The board-of-directors resolutions for de minimis and self-assessed institutions and for collateralized capacity are valid for one year after the Reserve Bank approves the net debit cap or the additional daylight overdraft capacity amount. An institution with a de minimis cap must renew its cap resolution annually by submitting a new resolution to its Reserve Bank. An institution with a self-assessed cap must perform a self-assessment annually and submit an updated cap resolution to its Reserve Bank. An institution with a self-assessed cap that has obtained additional collateralized capacity above its net debit cap must also submit a board-of-directors resolution to its Reserve Bank annually. In conjunction with an institution's primary supervisor, the Reserve Bank reviews each resolution for appropriateness.

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<sup>13</sup> Securities in transit refer to book-entry securities transferred over the National Book-Entry System that have been purchased by a depository institution, but not yet paid for and owned by the institution's customers. Depository institutions with self-assessed net debit caps that receive Reserve Bank approval to support a maximum daylight overdraft capacity limit with securities in transit must submit a board-of-directors resolution at least once in each twelve-month period. The resolution requires the depository institution's board of directors to acknowledge that (1) securities in transit will be used to collateralize daylight overdraft capacity in a manner consistent with the reasons and purposes submitted to the institution's administrative Reserve Bank, and (2) the value of the securities in transit pledged to the Reserve Bank will fluctuate intraday and over time.

Because the self-assessment process may, in some cases, require considerable time to complete and approve, institutions should be aware of the expiration date of their cap resolutions well in advance. If a new cap resolution is not received by the expiration date, an institution may be assigned a Zero cap, which prohibits the institution from using any Federal Reserve Bank daylight credit.

#### **F. Confidentiality of Cap Information**

The Federal Reserve considers cap categories and net debit caps to be confidential information and will share this information only with an institution's primary supervisor. Institutions are also expected to treat their cap information as confidential. Cap information should not be shared with outside parties or mentioned in any public documents.<sup>14</sup>

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<sup>14</sup> See SR Letter 85-35 *Confidentiality of Sender Net Debit Caps and Self-Assessment Ratings*.

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### **III. Daylight Overdraft Monitoring and Management**

The information provided in this section is intended to assist institutions in monitoring their Federal Reserve account balances in order to control daylight overdrafts. All institutions that maintain Federal Reserve accounts and use Federal Reserve services are expected to monitor their account balances on an intraday basis. Institutions should be aware of payments they are making from their accounts each day and how those payments are funded. Institutions are expected to use their own systems and procedures, as well as the Federal Reserve's systems, described below, to monitor their Federal Reserve account balance and payment activity.

#### **A. Daylight Overdraft Measurement**

To monitor an institution's overdraft activity and its compliance with the PSR policy and to calculate daylight overdraft charges, the Federal Reserve uses the Daylight Overdraft Reporting and Pricing System (DORPS). In addition, DORPS maintains information on institutions' current reported capital in order to calculate their net debit caps.

At the end of each Fedwire operating day, DORPS extracts transaction level information from Reserve Banks' accounting and payment systems and calculates end-of-minute account balances according to a set of daylight overdraft posting rules (see Appendix D). An institution's account balance is measured by DORPS at the end of each minute based on the institution's opening balance and all payment transactions posted to the institution's account up until that moment. Although DORPS records positive and negative total end-of-minute balances in each institution's account, positive end-of-minute balances do not offset negative balances at other times during the day for purposes of determining compliance with net debit caps or for calculating daylight overdraft fees. In addition, when more than one account is maintained for an institution by Reserve Banks, the multiple accounts are consolidated for purposes of calculating the end-of-minute balance.

The daylight overdraft measurement period begins with the scheduled opening time of Fedwire at 12:30 a.m. ET and continues until the scheduled closing time of Fedwire at 6:30 p.m. ET. In cases of extensions of Fedwire hours, the final closing account balance is recorded as if it were the balance at the scheduled closing time; and balances between the scheduled and actual closing times are not recorded in DORPS.

DORPS generates reports at the end of each two-week reserve maintenance period. These reports provide useful information for monitoring daylight overdrafts, such as peak daily overdrafts for the period, overdrafts in excess of the institution's net debit cap, and end-of-minute account balances for a particular day. Reserve Banks may make these reports available to institutions to assist in their internal account monitoring and control. These reports may also be provided by Reserve Banks in the process of counseling institutions that have incurred daylight overdrafts in excess of their daylight overdraft capacity. These reports are available in electronic or paper form. Institutions that do not incur daylight overdrafts for a particular period generally will not receive daylight overdraft reports. Sample annotated reports generated by DORPS can be found in part D of this section.

## **B. Monitoring Compliance with the PSR Policy**

Reserve Banks generally monitor institutions' compliance with the PSR policy over each two-week reserve maintenance period. At the end of each two-week reserve maintenance period, DORPS generates several reports that provide both Reserve Banks and depository institutions with information for monitoring daylight overdrafts, including the largest (or peak) daylight overdraft for each day during the period and daylight overdrafts in excess of an institution's approved daylight overdraft capacity. An institution incurs a cap breach when its account balance for a particular day shows one or more negative end-of-minute balances in excess of its single-day cap or when its average peak daylight overdraft over a reserve maintenance period exceeds its two-week average cap.<sup>15,16</sup>

The Federal Reserve considers all cap breaches violations of the PSR policy except in the following circumstances. First, the policy allows institutions in the exempt-from-filing cap category to incur up to two cap breaches in two consecutive two-week reserve maintenance periods. Second, cap breaches incurred by institutions in the administrative counseling flexibility program are not considered policy violations.<sup>17</sup> In addition, a Reserve Bank has discretion to waive a violation if it determines that the cap breach resulted from circumstances beyond the institution's control, such as an operational failure at a Reserve Bank.

For daylight overdraft purposes, accounts of U.S. branches and agencies of foreign banks and merger-transitions accounts are monitored on a consolidated basis; that is, a single account balance is derived by adding together the end-of-minute balances of each account. The accounts of affiliated institutions are monitored separately if they are separate legal entities. In addition, for institutions with accounts in more than one Federal Reserve District, an administrative Reserve Bank (ARB) is designated. The ARB coordinates the Federal Reserve's daylight overdraft monitoring activities for the consolidated accounts.

For example, consider a foreign bank family with branches or agencies in New York, Chicago, and San Francisco. Assume that the Federal Reserve Bank of New York is the ARB for the foreign bank and that the family's intraday position at selected intervals is as follows (in \$millions):

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<sup>15</sup> An institution's two-week average daily overdraft is calculated by adding the largest overdraft incurred for each day during a reserve maintenance period and dividing that sum by the number of business days in the period.

<sup>16</sup> A self-assessed institution that has been approved for collateralized daylight overdraft capacity above its net debit cap should avoid incurring daylight overdrafts that, on average over a two-week period, exceed its two-week average limit, and, on any day, exceed its single-day limit. The two-week average limit is equal to the two-week average cap plus the amount of applicable Reserve Bank-approved collateral, averaged over a two-week reserve-maintenance period. The single-day limit is equal to an institution's net debit cap plus the amount of applicable Reserve Bank-approved collateral.

<sup>17</sup> The Federal Reserve's program for administering daylight overdraft counseling on a flexible basis is designed to assist relatively small institutions that frequently exceed their net debit caps as a result of the posting of transactions without settlement-day finality. Under administrative counseling flexibility, the Reserve Banks work with affected institutions in identifying alternatives that will avoid or reduce daylight overdrafts caused by transactions without settlement-day finality, but the Banks generally do not subject these institutions to escalated levels of counseling, require collateral, or assign a zero cap. Institutions with an exempt-from-filing net debit cap are not eligible for the administrative counseling flexibility program.

Time	New York	Chicago	San Francisco	Consolidated
10 a.m.	(\$10)	\$5	\$15	\$10
12 p.m.	(\$20)	\$5	\$15	\$0
2 p.m.	(\$30)	\$10	\$15	(\$5)

On a consolidated basis, overdrafts at the New York branch are offset by positive balances in the Chicago and San Francisco branches except at 2 p.m. As the ARB, the Federal Reserve Bank of New York would compare the bank's consolidated position to its single-day net debit cap and would notify the New York office of the foreign bank if the overdraft exceeded the cap.

#### *Consequences of policy violations*

A policy violation may initiate a series of Reserve Bank actions aimed at deterring an institution's excessive use of Federal Reserve intraday credit. These actions depend on the institution's history of daylight overdrafts and financial condition. Initial actions taken by the Reserve Bank may include an assessment of the causes of the overdrafts and a review of account-management practices. In addition, the Reserve Bank may require an institution to submit documentation specifying actions it will take to address the overdraft problems. If policy violations continue to occur, the Reserve Bank may take additional actions. For example, if a financially healthy institution in the zero, exempt from filing, or de minimis cap category continues to breach its cap, the Reserve Bank may recommend that the institution file a cap resolution or perform a self-assessment to obtain a higher net debit cap.

In situations in which an institution continues to violate the PSR policy, and counseling and other Reserve Bank actions have been ineffective, the Reserve Bank may assign the institution a zero cap. In addition, the Reserve Bank may impose other account controls that it deems prudent, such as requiring increased clearing balances, rejecting Fedwire funds transfers, ACH credit originations, or NSS activity in excess of the account balance, or requiring the institution to prefund certain transactions. Reserve Banks also keep institutions' primary regulators apprised of any recurring overdraft problems.

### **C. Real-time Monitoring and the Account Balance Monitoring System**

The Reserve Banks use the Account Balance Monitoring System (ABMS) to monitor in real time the payment activity of institutions that may expose the Federal Reserve and other payment system participants to risk of loss. ABMS serves as both an information source and an account monitoring and control tool. It allows institutions to obtain intraday balance information for purposes of managing their use of daylight credit and avoiding overnight overdrafts. All institutions that have an electronic connection to the Federal Reserve's Fedwire funds transfer service, such as through a FedLine® terminal or a computer interface connection, are able to access their intraday Federal

Reserve account position in ABMS.<sup>18</sup> While ABMS is not a substitute for an institution's own internal tracking and monitoring systems, it does provide real-time account information based on Fedwire funds and securities transfers and NSS transactions. Additionally, ABMS captures debits and credits resulting from other payment activity as those transactions are processed in the Reserve Bank's accounting system. ABMS also provides authorized Federal Reserve Bank personnel with a mechanism to monitor and control account activity for selected institutions.

ABMS has the capability to reject or intercept certain transactions from posting to an institution's account. This capability is called "real-time monitoring." The Federal Reserve Banks use real-time monitoring to prevent selected institutions from effecting certain transactions if there are insufficient funds in their account to cover the payments. Institutions are generally notified before a Reserve Bank begins monitoring their accounts in real time.

If an institution's account is monitored in the "reject" mode in ABMS, any outgoing Fedwire funds transfer, NSS transaction, or ACH credit origination that would cause an overdraft above a specified threshold, such as the institution's net debit cap, would be rejected back to the sending institution. The institution could then initiate the transaction again when sufficient funds became available in its account. If an institution's account is monitored in the "intercept" mode, sometimes referred to as the "pend" mode, outgoing funds transfers that would cause an overdraft in excess of the threshold will not be processed but will be held for review by the Reserve Bank. These intercepted transactions will be rejected or released by the Reserve Bank once funds are available in the institution's account. Reserve Banks will normally be in direct contact with an institution in the event that any of its funds transfers are intercepted.

ABMS calculates balances three different ways so that institutions and Federal Reserve Bank staff can take into account the effect of the daylight overdraft posting rules on an institution's payment activity. The *Daylight Overdraft (DLOD) balance* reflects the balance in the account according to the transaction posting rules described in Appendix D and is usually equivalent to the balance measured by DORPS. The *DLOD balances* recorded in ABMS and the account balances measured through DORPS should be identical; however, the *DLOD balance* in ABMS may be slightly different from the account balance recorded in DORPS because DORPS takes an end-of-minute "snapshot," while ABMS continuously updates balances as transactions are processed. In addition, the *DLOD balance* in ABMS may be different from the account balance in DORPS if transactions are processed late.

A second balance calculated by ABMS, the *Account (ACCT) balance*, reflects the sum of all transactions posted to ABMS regardless of the daylight overdraft posting rules.

A third balance, the *Available Funds (AVL FNDS) balance*, shows funds available to an institution that includes its daylight overdraft capacity. The *AVL FNDS balance* is calculated by using

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<sup>18</sup> In 2002 and 2003, the Federal Reserve will be rolling out another means to view Federal Reserve accounting information through FedLine® for the Web. The Account Management Information application will provide depository institutions with real-time access to their intraday account balances, detailed transaction information, a variety of reports, and inquiry services. Institutions can obtain information on accessing the Account Management Information application and ABMS from any Federal Reserve Bank.



either the *DLOD balance* or the *ACCT balance* and then adding the totals for the institution's single-day net debit cap, any Reserve Bank-approved collateral, and any other amounts memo posted to the institution's account; Reserve Banks may choose to monitor institutions based on either the *ACCT balance* or *DLOD balance* depending on the circumstances.<sup>19</sup>

#### D. DORPS Reports<sup>20</sup>

Two standard DORPS reports are described below followed by sample formats. In addition, an annotated version of the standard report that is provided to institutions that incur daylight overdraft fees can be found in Section IV.

##### *Intraday Position Report*

The Intraday Position Report shows an institution's Federal Reserve account balance at one-minute intervals throughout the day. The upper portion of the report includes information about the institution, such as its name and ABA routing number, its cap and cap category, and its capital measure. If the institution has more than one Federal Reserve account, the words "consolidated entity" will appear on the report and the figures shown will represent the aggregate balances across all accounts for the institution.

The main portion of the report, which may span several pages, shows end-of-minute account balances for a single day. The date of the balance data in the report is indicated above Column (1). The first column in the report shows the end-of-minute times associated with the balances displayed on a particular line between 12:30:00 a.m. and 6:30:59 p.m. All times shown are Eastern Time. A vertical line (|) is used to indicate a span of minutes during which balances did not change and are therefore not displayed in order to conserve space on the report. Two asterisks (\*\*) shown next to a particular interval indicate that this interval was excluded from daylight overdraft calculations used in monitoring compliance with the PSR policy and for calculating daylight overdraft fees. Such exclusions normally result from extended Reserve Bank computer operational difficulties. The reason for any exclusions will be documented on the report.

Column (2), the **Fedwire balance**, shows the overall end-of-minute balance in the institution's account, and is the sum of Columns (5) and (6). The balance in the first row in Column (2) is calculated as the institution's opening balance (which is equal to the previous day's closing balance) plus any debits and credits that are posted at the opening of business according to the transaction posting rules (see Appendix D). Any negative values in Column (2) are daylight overdrafts.

Columns (3) through (6) represent components of the overall account balance shown in Column (2). Note that negative values in these columns do not necessarily imply that the institution incurred a daylight overdraft, as positive balances in one column may offset negative balances in another column. Column (3), the **Funds-only balance**, represents the balance in the account resulting from the

<sup>19</sup> Reserve Banks use the memo post function of ABMS to post transactions to ABMS that may not be passed to the Federal Reserve Bank's accounting system until later in the day (e.g., cash shipments).

<sup>20</sup> The DORPS reports contained herein will be revised within the next 6 months to reflect recent changes to the PSR policy. This document will be updated to reflect these revisions.

institution's opening balance that day and cumulative debits and credits to the account from originations and receipts of Fedwire funds transfers. Column (4), **Non-wire activity balance**, is the institution's account balance resulting from debits and credits from non-Fedwire activity, such as check and ACH transactions, posted according to the transaction posting rules. Column (5), the **Adjusted-funds balance**, is the sum of Columns (3) and (4).

Column (6), the **Book-entry balance**, shows the balance in the account resulting from book-entry securities transfers and from debits and credits for redemptions, interest payments, and original issue purchases of Treasury and government agency securities. Columns (7) and (8) show the value of any fixed amount of collateral that the institution has pledged for daylight overdraft capacity. The value of any in-transit securities that have been pledged may not be included in Column (7), although an asterisk (\*) would indicate that the institution has pledged securities in transit as collateral.

Below Columns (2) through (6), the maximum and average end-of-minute negative balance amount for the day is displayed. If no negative balance was recorded for a particular column, a zero will be displayed. For daylight overdraft monitoring purposes, the maximum overdraft for the day under Column (2), if any, is compared against an institution's single-day cap to determine if a cap breach occurred. The average overdraft shown under Column (2) is the basis for the calculation of daylight overdraft fees.

**Intraday Position Report (DORPS Reports 703 and 713)**

RUN DATE: _____	FEDERAL RESERVE BANK	PROGRAM: DOPQ703N
RUN TIME: _____	OF _____	PAGE: ____
	_____ OFFICE	

INTRA-DAY POSITION  
(PERIOD ENDING \_\_-\_\_-\_\_)  
00:30 TO 18:30  
\$ IN THOUSANDS

[NAME OF INSTITUTION] \_\_\_\_\_  
[ADDRESS OF INSTITUTION] \_\_\_\_\_  
CONTACT: \_\_\_\_\_  
TITLE: \_\_\_\_\_

CAP RATING: \_\_\_\_\_  
AS OF: \_\_\_\_\_  
[TYPE OF] CAPITAL: \_\_\_\_\_  
AS OF: \_\_\_\_\_

ABA: \_\_\_\_\_ SINGLE DAY CAP: \_\_\_\_\_  
DATE: \_\_\_\_\_ TWO WEEK CAP: \_\_\_\_\_

TIME (1)	FEDWIRE BALANCE (2)	FUNDS ONLY BALANCE (3)	NON WIRE ACTIVITY BALANCE (4)	ADJUSTED FUNDS BALANCE (5)	BOOK ENTRY BALANCE (6)	BOOK ENTRY COLLATERAL (7)	FUNDS COLLATERAL (8)
00:30	_____	_____	_____	_____	_____	_____	_____
.:.	_____	_____	_____	_____	_____	_____	_____
.:.	_____	_____	_____	_____	_____	_____	_____

MAXIMUM OVERDRAFT FOR DATE: \_\_\_\_\_  
AVERAGE OVERDRAFT FOR DATE: \_\_\_\_\_

‘\*’ = IN-TRANSIT COLLATERAL HAS BEEN PLEDGED.

‘|’ = A SPAN OF DUPLICATE INTERVALS.

‘\*\*’ = INTERVALS EXCLUDED FROM AVERAGE OVERDRAFT CALCULATION BECAUSE OVERDRAFTS RESULTED FROM FEDERAL RESERVE PROCESSING PROBLEMS OR OTHER EXCEPTIONAL CIRCUMSTANCES.

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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*Daylight Overdraft Monitoring Summary Report*

The Daylight Overdraft Monitoring Summary Report provides a summary of daylight overdraft activity in an institution's account over a two-week reserve maintenance period. The upper portion of the report includes information about the institution, such as its name and ABA number, and its cap and cap category. Most of the information presented in the body of this report can be derived from the Intraday Position Report for the two-week period (shown above). Unlike the Intraday Position Report, however, all overdraft amounts are shown as positive values in this report. The report shows only the maximum or peak overdraft for each day on which one or more end-of-minute total balances in the institution's account was negative.

The first column in the report shows the date on which an overdraft occurred. Column (2) shows the end-of-minute time associated with the peak total overdraft in the account, shown in column (3). All times shown are Eastern Time. Column (3) represents the peak daylight overdraft for the day in the institution's total account balance (equal to the Fedwire balance, Column (2), in the Intraday Position Report). For most institutions, Column (4), **single-day adjusted capacity**, is equal to **single-day capacity**, shown in the upper portion of the report. For certain institutions, such as those in financially weakened condition, single-day adjusted capacity also includes collateral pledged for daylight overdraft purposes. Column (5) represents the excess, if any, of the peak overdraft above the institution's single-day adjusted capacity. Column (5) is equal to Column (3) minus Column (4).

Column (6), the **cap utilization ratio**, is calculated as the ratio of the institution's peak total overdraft, shown in Column (3) divided by the single-day adjusted capacity (this ratio cannot be calculated for an institution with a single-day adjusted capacity equal to zero). Columns (7) and (8) show the peak overdrafts for the day resulting from funds and securities transfer activity, respectively. Note that these peak overdrafts may not have occurred at the same time as the peak total overdraft in Column (3). Thus, Column (3) cannot be derived by adding together Columns (7) and (8). For the **peak funds-related overdraft** in Column (7), the negative adjusted funds balance (Column (3) in the Intraday Position Report) is offset by any credits in the account at the same time resulting from book-entry securities activity (that is, a positive balance in Column (6) of the Intraday Position Report). Column (8) shows the **peak book-entry securities-related overdraft** net of any simultaneous credits in the adjusted funds balance.

Near the bottom of the report, several two-week average statistics are shown in order to facilitate monitoring of overdrafts relative to an institution's two-week cap. The **two-week average overdraft** figure is calculated by adding any peak overdrafts shown in Column (3) and dividing by the number of business days in the reserve maintenance period, usually ten. The **excess over the two-week average cap** is the difference between the two-week average overdraft and the institution's two-week average cap. The **two-week cap utilization ratio** is calculated by dividing the two-week average overdraft by the two-week average cap.

**Daylight Overdraft Monitoring Summary Report (DORPS Reports 701 and 731)**

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RUN DATE : \_\_\_\_\_  
RUN TIME : \_\_\_\_\_

FEDERAL RESERVE BANK  
OF \_\_\_\_\_  
\_\_\_\_\_ OFFICE

PROGRAM : DOPQ701N  
PAGE : 1

DAYLIGHT OVERDRAFT MONITORING SUMMARY  
TWO-WEEK PERIOD ENDING \_\_-\_\_-\_\_  
\$ IN THOUSANDS

[NAME OF INSTITUTION] \_\_\_\_\_  
[ADDRESS OF INSTITUTION] \_\_\_\_\_

CONTACT : \_\_\_\_\_  
TITLE : \_\_\_\_\_

ABA : \_\_\_\_\_

CAP RATING : \_\_\_\_\_  
AS OF : \_\_\_\_\_

SINGLE DAY : \_\_\_\_\_  
TWO WEEK : \_\_\_\_\_

CAPACITY

DATE (1)	TIME (2)	TOTAL PEAK-OD (3)	SINGLE DAY ADJ. CAPACITY (4)	EXCESS OVER SINGLE DAY ADJ. CAPACITY (5)	CAP UTIL RATIO (6)	PEAK FUNDS + BE CR OVERDRAFT (7)	PEAK BE + FUNDS CR OVERDRAFT (8)
_____	_____	_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____	_____	_____

TWO WEEK AVERAGE OVERDRAFT AMOUNT : \_\_\_\_\_

EXCESS OVER 2 WEEK AVERAGE CAP : \_\_\_\_\_

TWO WEEK AVERAGE UTILIZATION RATIO : \_\_\_\_\_

‘....’ = AN AMOUNT LESS THAN \$500.

‘\*\*\*’ = CERTAIN INTERVALS WERE EXCLUDED FROM THE TOTAL PEAK OD CALCULATION BECAUSE THE OVERDRAFTS IN THESE INTERVALS RESULTED FROM FEDERAL RESERVE PROCESSING PROBLEMS OR OTHER EXCEPTIONAL CIRCUMSTANCES.

CAP UTILIZATION = AMOUNT OF TOTAL OVERDRAFT - COLLATERALIZED BE OD / AMOUNT OF ADJUSTED SINGLE DAY CAPACITY.

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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#### **IV. Daylight Overdraft Fees**

In 1992, the Board approved the assessment of daylight overdraft fees beginning in April 1994. The Federal Reserve charges institutions fees for daylight overdrafts incurred in their Federal Reserve accounts. This section describes the fee calculation and assessment.

##### **A. Calculation of Daylight Overdraft Charges**

For each two-week reserve-maintenance period, the Reserve Banks calculate and assess daylight overdraft fees, which are equal to the sum of any daily daylight overdraft charges during the reserve-maintenance period. For each day, an institution's daylight overdraft charge is the effective daily rate charged for daylight overdrafts multiplied by the average daylight overdraft for the day minus a deductible valued at an effective daily rate.

Daylight overdraft fees are calculated using an annual rate of 36 basis points, quoted on the basis of a 24-hour day. The annual rate is converted to an effective rate by multiplying it by the fraction of the day that Fedwire is scheduled to be open, currently 18 hours out of 24, or 18/24. Thus, the current effective rate charged for overdrafts is 27 basis points (36 basis points x 18/24 hours) on an annualized basis. The effective annual rate is converted to an effective daily rate by multiplying it by 1/360.

The average overdraft for each day is calculated by adding together any negative end-of-minute balances incurred during the scheduled operating day of the Fedwire funds transfer system and dividing this amount by the number of minutes in the scheduled Fedwire operating day.<sup>21</sup> All end-of-minute overdrafts incurred during the Fedwire day, including those not exceeding an institution's net debit cap, are included in this calculation. Positive account balances on a given day are effectively set to zero and do not offset any overdrafts incurred that day in computing the average daylight overdraft amount. The occasional extensions of Fedwire beyond the standard 18-hour day do not affect the number of minutes used in computing the average overdraft.

The gross overdraft charge for each day is reduced based on an institution's deductible. The deductible represents a threshold level of average overdrafts that an institution may incur without being charged a fee. This deductible is intended to provide liquidity to the payment system and to compensate for overdrafts caused by minor computer outages at Reserve Banks. As a result of the deductible, many institutions with daylight overdrafts in a particular two-week period do not incur fees.

The deductible equals 10 percent of an institution's capital measure for daylight overdraft purposes; this amount is valued at the daily rate charged for overdrafts described above with one

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<sup>21</sup> The scheduled operating day for the Fedwire funds transfer system currently extends from 12:30:00 a.m. Eastern Time to 6:30:59 p.m. Eastern Time, a total of 1081 minutes.

exception: the portion of the day for which the daily rate is applied to the deductible is fixed at 10 out of 24 hours. This calculation will not change even if Fedwire operating hours are modified.<sup>22</sup>

For each reserve maintenance period, the daylight overdraft charge is equal to the sum of the charges for each day of the period. The gross overdraft charge for a particular day is equal to the effective daily rate charged for overdrafts (the effective rate times 1/360) multiplied by the average overdraft for the day. The charge for each day is equal to the gross overdraft charge less the deductible, valued at the effective daily rate. The example shown in Figure IV-1 below uses the following equations to calculate the daylight overdraft charge.

$$\text{Gross overdraft charge} = \text{Effective daily rate} \times \text{Average overdraft}$$

$$\text{Daily charge} = \text{Gross overdraft charge} - \text{Value of the deductible}$$

**Figure IV-I**  
**Example of Daylight Overdraft Charge Calculation**

Policy parameters:

Official Fedwire day = 18 hours

Deductible percentage of capital = 10%

Rate charged for overdrafts = 36 basis points (annual rate)

Institution's parameters:

Risk-based capital = \$50 million

Sum of end-of-minute overdrafts for one day = \$4 billion

Daily Charge calculation:

Effective daily rate =  $.0036 \times (18/24) \times (1/360) = .0000075$

Average overdraft =  $\$4,000,000,000 / 1081 \text{ minutes} = \$3,700,278$

Gross overdraft charge =  $\$3,700,278 \times .0000075 = \$27.75$

Effective daily rate for deductible =  $.0036 \times (10/24) \times (1/360) = .0000042$

Value of the deductible =  $.10 \times \$50,000,000 \times .0000042 = \$21.00$

Overdraft charge =  $27.75 - 21.00 = \$6.75$

Identical daily overdraft activity for each day of the reserve maintenance period (generally 10 business days) would result in a two-week overdraft charge of \$67.50.

<sup>22</sup> When Fedwire operating hours are modified, gross fees charged to institutions do not change. If the value of the deductible increased, however, net fees would be reduced.



## **B. Billing and Adjustments**

### *Assessment of charges*

At the end of each two-week reserve-maintenance period, Reserve Banks send a report of preliminary daylight overdraft charges to each institution that incurred charges in that period, as discussed below. Final charges are calculated and an assessment to the institution's Federal Reserve account will be made at the end of the reserve-maintenance period following the reserve maintenance period in which charges were assessed. Two-week reserve-maintenance period charges of \$25 or less for most institutions will be waived.<sup>23</sup> Depository institutions may not use earnings credits to offset overdraft charges.

Adjustments to calculated daylight overdraft charges may be appropriate in limited circumstances, such as in cases of extended computer or communications operational difficulties at a Reserve Bank or to recognize errors or incorrect accounting entries. However, Reserve Banks will not make adjustments to compensate for depository institutions' computer problems. The Reserve Banks will consider adjustments only under certain circumstances.

### *Advice of Daylight Overdraft Charges Report*

Institutions that incur overdrafts that are sufficiently large to result in daylight overdraft fees will receive a preliminary Advice of Daylight Overdraft Charges Report at the close of the reserve maintenance period in which the overdrafts occurred. This report shows the average overdraft for each day on which fees were incurred. Column (1) shows the date on which an overdraft occurred that was larger, on an average basis, than the institution's deductible amount. Column (2) shows the average overdraft for the day on a per-minute basis. Column (3) shows the gross overdraft charge amount, which is equal to the average overdraft in Column (2) multiplied by the effective daily rate charged on daylight overdrafts as described in Section IV of the Guide. Column (4) is equal to the gross overdraft charge amount in Column (3) less the institution's deductible, which is generally equal to 10 percent of its capital measure. The amount of the deductible is shown above Column (4). The bottom of the report indicates the date on which fees will be charged to the institution's account. If the total charges are \$25 or less for a two-week period, however, the charges may be waived, as indicated on the report.

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<sup>23</sup> Daylight overdraft fees of \$25 or less are not waived for Edge and agreement corporations, bankers' banks that have not waived their exemption from reserve requirements, and limited-purpose trust companies. These types of institutions do not have regular access to the discount window and, therefore, should not incur daylight overdrafts in their Federal Reserve accounts. The Federal Reserve charges a daylight-overdraft penalty fee against the average daily daylight overdraft incurred by such institutions.

**Daylight Overdraft Charge Reports (DORPS Reports 700, 426, 462 and 464)**

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RUN DATE : \_\_\_\_\_ FEDERAL RESERVE BANK \_\_\_\_\_ PROGRAM : DOPQ462N  
 RUN TIME : \_\_\_\_\_ OF \_\_\_\_\_ PAGE : 1  
 \_\_\_\_\_ OFFICE

STATEMENT OF DAYLIGHT OVERDRAFT CHARGES  
 TWO-WEEK PERIOD ENDING \_\_-\_\_-\_\_

[NAME OF INSTITUTION] \_\_\_\_\_  
 [ADDRESS OF INSTITUTION] \_\_\_\_\_

CONTACT : \_\_\_\_\_  
 TITLE : \_\_\_\_\_

ABA : \_\_\_\_\_ CAPITAL : \_\_\_\_\_  
 AS OF: \_\_\_\_\_ VALUE OF DEDUCTIBLE : \_\_\_\_\_

DATE (1)	AVERAGE DAYLIGHT OVERDRAFT (IN THOUSANDS) (2)	GROSS OVERDRAFT CHARGE AMOUNT (3)	DAYLIGHT OVERDRAFT CHARGE (4)
__-__-__	_____	_____	_____

TOTAL CHARGE: \_\_\_\_\_

'....' = AN AMOUNT LESS THAN \$500.

\*\*\* = CERTAIN TIME INTERVALS WERE EXCLUDED FROM THE AVERAGE OVERDRAFT CALCULATION BECAUSE OVERDRAFTS IN THESE INTERVALS RESULTED FROM FEDERAL RESERVE PROCESSING PROBLEMS OF OTHER EXCEPTIONAL CIRCUMSTANCES.

THE ABOVE AMOUNT WILL BE CHARGE TO YOUR ACCOUNT ON \_\_-\_\_-\_\_. CALCULATIONS ARE SHOWN BELOW:

VALUE OF THE DEDUCTIBLE = CAPITAL \* .1 \* ANNUAL CHARGE RATE OF .0024 \* 1/360 \* 10/24.  
 GROSS OVERDRAFT AMOUNT = AVG DAYLIGHT OD \* ANNUAL CHARGE RATE OF .0024 \* 1/360 \* 10/24.  
 DAYLIGHT OVERDRAFT CHARGE = GROSS OVERDRAFT AMOUNT - VALUE OF THE DEDUCTIBLE.

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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*Statement of Daylight Overdraft Charges Report*

A Statement of Daylight Overdraft Charges Report, which is similar in format to the Advice of Daylight Overdraft Charges, will be produced at the close of the following reserve maintenance period, at which time fees will be charged to the institution's account. If the Reserve Bank subsequently adjusts the charges, a revised statement of charges will be sent to the institution. This report will include the amount of the adjustment and the reason for the adjustment. In this circumstance, the Reserve Bank will reverse the original charges that were assessed to the institution's account and the account will be debited for the revised amount.

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## V. Special Situations

### A. U.S. Branches and Agencies of Foreign Banks<sup>24</sup>

In general, U.S. branches and agencies of foreign banks are treated in the same manner as domestic institutions under the Federal Reserve's PSR policy. However, there are several unique considerations affecting the way in which the policy is applied to U.S. branches and agencies of foreign banks, as discussed below and in the self-assessment procedures in Section VI of the Guide.

Net debit caps for foreign banks are calculated generally in the same manner as they are calculated for domestic institutions. Net debit caps are calculated by multiplying an institution's cap multiple by an institution's capital measure. However, the determination of the capital measure, known as the U.S. capital equivalency, is substantially different for foreign banks and depends on the Foreign Banking Organization's (FBO) strength of support assessment (SOSA) ranking and on whether the bank is a Financial Holding Company (FHC).<sup>25, 26</sup>

#### *U.S. capital equivalency*

For U.S. branches and agencies of foreign banks, net debit caps on daylight overdrafts in Federal Reserve accounts are calculated by applying the cap multiples for each cap category to the FBO's U.S. capital equivalency measure. U.S. capital equivalency is equal to the following:

- 35 percent of capital for FBOs that are financial holding companies (FHCs)
- 25 percent of capital for FBOs that are not FHCs and are ranked a SOSA 1
- 10 percent of capital for FBOs that are not FHCs and are ranked a SOSA 2
- 5 percent of "net due to related depository institutions" for FBOs that are not FHCs and are ranked a SOSA 3.<sup>27</sup>

U.S. branches and agencies of foreign banks that wish to establish a non-zero net debit cap and are an FHC or are ranked SOSA 1 or 2 are required to file the Annual Daylight Overdraft Capital Report for U.S. Branches and Agencies of Foreign Banks (FR 2225). Granting a net debit cap, or any

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<sup>24</sup> A U.S. branch or agency is a branch or agency of a Foreign Banking Organization (FBO) located in the United States.

<sup>25</sup> The SOSA ranking is composed of four factors, including the FBO's financial condition and prospects, the system of supervision in the FBO's home country, the record of the home country's government in support of the banking system or other sources of support for the FBO; and transfer risk concerns. Transfer risk relates to the FBO's ability to access and transmit U.S. dollars, which is an essential factor in determining whether an FBO can support its U.S. operations. The SOSA ranking is based on a scale of 1 through 3, with 1 representing the lowest level of supervisory concern.

<sup>26</sup> The Gramm-Leach-Bliley Act (Public Law 106-102, 113 Stat. 1338 (1999)) defines a financial holding company as a bank holding company that meets certain eligibility requirements. In order for a bank holding company to become a financial holding company and be eligible to engage in the new activities authorized under the Gramm-Leach-Bliley Act, the Act requires that all depository institutions controlled by the bank holding company be well capitalized and well managed. With regard to a foreign bank that operates a branch or agency or owns or controls a commercial lending company in the United States, the Act requires the Board to apply comparable capital and management standards that give due regard to the principle of national treatment and equality of competitive opportunity.

<sup>27</sup> This item is reported on the foreign bank family's quarterly Report of Assets and Liabilities of U.S. Branches and Agencies of Foreign Banks (Federal Financial Institution Examination Council report: FFIEC-002).

extension of intraday credit, to a depository institution is at the discretion of the Reserve Bank. In limited circumstances, a Reserve Bank may grant a net debit cap or extends intraday credit to a financially healthy SOSA 3-ranked FBO, the Reserve Bank may require such credit to be fully collateralized, given the heightened supervisory concerns with SOSA 3-ranked FBOs. Contact your Reserve Bank

As in the case of U.S. institutions, the ARB must have the ability to assess regularly the financial condition of a foreign bank in order to grant the institution a daylight overdraft cap other than zero. The ARB may require information regarding Tier I and total risk-based capital ratios for the consolidated foreign bank. The ARB may require U.S. branches and agencies of foreign banks seeking a positive daylight overdraft cap (exempt, de minimis, or self-assessed cap categories) to provide capital ratios at the time the cap is established and annually thereafter. Workpapers for capital ratios should be maintained at a designated U.S. branch or agency and are subject to review by the institution's primary supervisor. The Federal Reserve considers capital information provided to the ARB in connection with an institution's daylight overdraft cap to be confidential.

#### *Allocation of caps*

The Federal Reserve monitors the daylight overdrafts of U.S. branches and agencies of foreign banks on a consolidated basis. Each foreign bank family, consisting of all of the U.S. branches and agencies of a particular foreign bank, has a single daylight overdraft cap. Like other institutions with accounts in more than one Federal Reserve District, intraday account balances of all the U.S. branches and agencies in a foreign bank family are added together for purposes of monitoring against the daylight overdraft cap, as described in Section III.

For real-time monitoring purposes, however, a foreign bank that has offices in more than one District may choose to allocate a portion of its net debit cap to branches or agencies in Districts other than that of the ARB. Unless a foreign bank family instructs otherwise, the Federal Reserve will assign the dollar value of the family's single-day daylight overdraft cap to the branch or agency located in the Federal Reserve District of the ARB. Using a format similar to the sample letter in Appendix B, the foreign bank family may indicate to the ARB the dollar amount to be allocated to offices in other Districts. Any amount that is not allocated to offices in other Districts will be assigned to the branch or agency in the District of the ARB. A foreign bank may revise its cap allocation from time to time by communicating the revision to its ARB. Such revisions are expected to be infrequent.

### **B. Nonbank Banks and Industrial Banks**

Nonbank banks grandfathered under the Competitive Equality Banking Act of 1987 (CEBA), as implemented in Section 225.52 of Federal Reserve Regulation Y, industrial banks, or industrial loan companies may not incur daylight overdrafts on behalf of affiliates, except in three circumstances. First, the prohibition does not extend to overdrafts that result from inadvertent computer or accounting errors beyond the control of the nonbank, industrial bank, or industrial loan company. Second, nonbank banks are permitted to incur overdrafts on behalf of affiliates that are primary U.S. government securities dealers, provided such overdrafts are fully collateralized. Third, overdrafts

incurred in connection with an activity that is financial in nature are also permitted.<sup>28</sup> A nonbank bank, industrial bank, or industrial loan company loses its exemption from the definition of bank under the Bank Holding Company Act if it incurs prohibited overdrafts. For this purpose, an affiliate is any company that controls the nonbank bank or industrial bank, is controlled by it, or is under common control with it.

Nonbank banks and industrial banks must comply with the PSR policy regarding net debit caps in the same manner as other depository institutions; these institutions are also subject to daylight overdraft fees, calculated using the same methodology as that applied to other depository institutions. In addition to the regular monitoring of nonbanks or industrial banks that are grandfathered under CEBA, the Federal Reserve uses a separate formula for calculating intraday Federal Reserve account positions for these institutions.

If a nonbank bank or industrial bank incurs overdrafts that are prohibited, the Reserve Bank will request that the institution provide detailed information about activity processed for affiliate accounts, so that it can determine whether the overdraft was incurred on behalf of an affiliate. If the overdraft was on behalf of a primary dealer affiliate, the nonbank bank or industrial bank is required to demonstrate that the overdraft was fully collateralized. If the overdraft was on behalf of an affiliate and was financial in nature, the nonbank or industrial bank is required to demonstrate the purpose of the overdraft as defined by Section 4(k)(5) of the Bank Holding Act. Nonbank banks and industrial banks that do not maintain accounts for affiliates may file a letter with the Reserve Bank on an annual basis certifying that they do not currently have affiliate accounts and will notify the Reserve Bank promptly should that status change. (Appendix B provides a sample certification letter.)

### **C. Institutions Subject to Daylight Overdraft Penalty Fees**

Under the PSR policy, institutions that have Federal Reserve accounts but lack regular access to the discount window are not eligible for a positive daylight overdraft cap. These institutions should not incur any daylight overdrafts. If such an institution were to incur an overdraft, however, the Reserve Bank would generally require it to pledge collateral sufficient to cover the peak amount of the overdraft for a specified period.

The institutions described below are subject to a penalty fee on any daylight overdrafts incurred in their Federal Reserve accounts. The penalty fee is intended to provide a strong incentive for these institutions to avoid incurring any daylight overdrafts in their Federal Reserve accounts. The penalty fee is assessed at a rate equal to the regular daylight overdraft fee plus 100 basis points (annualized, 24-hour rate). The penalty fee is calculated and assessed in the same manner as the daylight overdraft fee charged other institutions, as described in Section IV, with the following exceptions: no deductible is used in the calculation, there is no fee waiver provision, and if the calculated charges in any two-week reserve maintenance period are less than \$25, a minimum fee of \$25 will be charged.

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<sup>28</sup> Information concerning the definition of “financial in nature” can be found within the amendments to the Federal Reserve’s Regulation Y, located at <http://www.federalreserve.gov/regulations/regref.htm#y>.

*Edge Act and agreement corporations*<sup>29</sup>

Edge Act and agreement corporations do not have regular access to the discount window and should refrain from incurring daylight overdrafts in their Federal Reserve accounts. In the event that any daylight overdrafts occur, the Edge Act or agreement corporation will be required to pledge collateral to cover the overdrafts. Like foreign banks, Edge Act and agreement corporations that have branches in more than one Federal Reserve District are monitored on a consolidated basis.

*Bankers' banks*<sup>30</sup>

Bankers' banks, including corporate credit unions, are exempt from reserve requirements and do not have regular access to the discount window. They do, however, have access to Federal Reserve payment services. Bankers' banks may voluntarily waive their exemption from reserve requirements, and thus gain regular access to the discount window. Such bankers' banks would be free to establish net debit caps and would be subject to the PSR policies in the same manner as other depository institutions. Those bankers' banks that have not waived their exemption from reserve requirements should refrain from incurring overdrafts and will be required to pledge collateral to cover any daylight overdrafts they do incur.

*Limited-purpose trust companies*<sup>31</sup>

The Federal Reserve Act permits the Board to grant Federal Reserve membership to limited-purpose trust companies subject to conditions the Board may prescribe. Limited-purpose trust companies that maintain Federal Reserve accounts should refrain from incurring overdrafts and will be required to pledge collateral to cover any daylight overdrafts that they incur.

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<sup>29</sup> These institutions are organized under Section 25A of the Federal Reserve Act (12 U.S.C. 611-631) or have an agreement or undertaking with the Board of Governors under Section 25 of the Federal Reserve Act (12 USC 601-604a).

<sup>30</sup> For the purposes of the Federal Reserve's PSR policy, a bankers' bank is a financial institution that is not required to maintain reserves under the Federal Reserve's Regulation D (12 CFR 204) because it is organized solely to do business with other financial institutions, is owned primarily by the financial institutions with which it does business, and does not do business with the general public. Such bankers' banks also generally are not eligible for Federal Reserve Bank credit under the Board's Regulation A (12 CFR 201.2(c)(2)).

<sup>31</sup> For the purposes of this policy, a limited-purpose trust company is a trust company that, because of limitations on its activities, does not meet the definition of "depository institution" in Section 19(b)(1)(A) of the Federal Reserve Act (12 USC 461(b)(1)(A)).



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## VI. Self-Assessment Procedures

This section provides information and guidelines for depository institutions choosing to perform a self-assessment to establish a net debit cap in the average, above average, or high categories.<sup>32</sup> If an institution elects to establish a net debit cap through a self-assessment it must analyze and evaluate the following four components:

- Creditworthiness;
- Intraday funds management and control;
- Customer credit policies and controls; and
- Operating controls and contingency procedures

The institution must assign a rating based on its assessment to each of the above components and then combine the ratings to determine the appropriate net debit cap category. Part E of this section provides a matrix that must be used to combine the four components into a single rating. Appendix A contains worksheets that should be used in conducting an assessment. A Reserve Bank reserves the right to evaluate independently the four factors of an institution's self-assessment. If the Reserve Bank arrives at an overall rating that is lower than that determined by the institution, the Reserve Bank's evaluation will determine the institution's cap category. In addition, Section II of this manual provides information on filing a resolution to establish the cap once the self-assessment has been completed, and Appendix B provides sample resolutions.

### A. Creditworthiness Component

For most institutions, the appropriate net debit cap category is principally determined by the institution's most recent supervisory ratings and, for domestically chartered institutions, the institution's capital category.<sup>33</sup> In the self-assessment, an institution's creditworthiness is assigned one of the following ratings: *Excellent*, *Very Good*, *Adequate*, or *Below Standard*. An *Excellent* or a *Very Good* rating indicates that an institution has demonstrated a sustained level of financial performance above its peer group norm. As a general matter, fundamentally sound depository institutions that are experiencing only modest weakness will receive a rating of *Adequate*. The financial performance of such institutions is usually at or just slightly below the peer norm.

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<sup>32</sup> An institution's cap category in combination with an institution's capital measure determines its net debit cap. Domestically chartered institutions use 100 percent of their risk-based capital as their capital measure. U.S. branches or agencies of foreign banks use a percentage of their worldwide capital, based on their financial holding company (FHC) status and their SOSA ranking, as their capital measure. For more information on the calculation of U.S. branch and agency capital measure calculation, please see Section V.

<sup>33</sup> For the purposes of the self-assessment procedures, a domestically chartered institution's capital category is defined by the Federal Deposit Insurance Act.

If an institution's creditworthiness rating is *Adequate* or higher, it may then proceed to rate the other three components in the self-assessment process, subject to the provisions regarding affiliated entities, discussed below. The institution's assessment of the other three key components will determine whether its composite rating will be lower than or equal to that determined by the creditworthiness component. The rating should be recorded in the assessment worksheet found in Appendix A.

#### *Matrix approach to assessing creditworthiness*

In most instances, an institution's creditworthiness component is determined by the creditworthiness matrix, which translates an institution's supervisory rating and, for domestically chartered institutions, the institution's capital category, into a creditworthiness assessment. This approach is designed to simplify the process of assessing creditworthiness. Domestically chartered institutions should use Table VI-1 to determine their creditworthiness component, and U.S. branches and agencies of foreign banks should use Table VI-2.

Certain conditions, however, may affect the creditworthiness of the institution and, as a result, the Reserve Bank may require the institution to perform a full assessment of its creditworthiness. A full assessment of creditworthiness includes an assessment of capital adequacy, key performance measures (including asset quality, earnings performance, and liquidity), and the condition of affiliated institutions. The institution's primary regulator may review the full assessment. The Reserve Bank may, in consultation with the primary supervisor, deny an institution access to intraday credit or modify the institution's net debit cap. Examples of certain conditions that warrant an institution to perform a full assessment of its creditworthiness, regardless of an institution's supervisory ratings or capital category, are:

- If the institution is a financial holding company (FHC) and is in a cure period<sup>34</sup>
- Any significant developments that may materially affect the financial condition or supervisory assessment of the institution

Procedures for completing a full assessment of creditworthiness are contained in Appendix A, along with the worksheets that may be used for this process. In its self-assessment submission, an institution performing a full assessment of creditworthiness must cite the critical factors that would support a proposed creditworthiness rating differing from that indicated by the matrix approach. For example, such factors might include the establishment of a firm plan to achieve a level of capital commensurate with a designation of Adequately Capitalized, which has been approved by the institution's primary supervisor and Reserve Bank. Significant enhancements in the institution's available liquidity or reductions in its problem assets could also be used to support a higher rating in the context of a full assessment of creditworthiness. However, the reasons for greater emphasis on other factors should be well-documented in the submission by the institution's management.

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<sup>34</sup> A cure period is a provisional time period where an institution is allowed to resolve issues related to its noncompliance with regulatory requirements.

Regardless of the results of the full assessment of creditworthiness, the creditworthiness rating achieved is not necessarily related to or reflective of the rating that would result from a regulatory examination.

**Table VI – 1: Creditworthiness matrix for domestically chartered institutions\***

Capital Category	Supervisory Composite Rating <sup>35</sup>			
	<i>Strong</i>	<i>Satisfactory</i>	<i>Fair</i>	<i>Marginal or Unsatisfactory</i>
<i>Well Capitalized</i>	Excellent	Very Good	Adequate	Below Standard
<i>Adequately Capitalized</i>	Very Good	Very Good	Adequate	Below Standard
<i>Undercapitalized</i>	**	**	Below Standard	Below Standard
<i>Significantly or Critically Undercapitalized</i>	Below Standard	Below Standard	Below Standard	Below Standard

\*If an institution has affiliates, the supervisory composite rating incorporates an assessment of the condition of affiliates. Appendix A contains worksheets that should be used to incorporate the condition of affiliates into the supervisory composite rating.

\*\* Institutions that fall into this category should perform a full assessment of creditworthiness. A full assessment of creditworthiness includes an assessment of capital adequacy, key performance measures (including asset quality, earnings performance, and liquidity), and the condition of affiliated institutions.

Under the matrix approach, a domestically chartered institution whose capital ratios are within the category of Well Capitalized or Adequately Capitalized and whose supervisory composite rating is Strong, Satisfactory, or Fair, will generally qualify for a positive net debit cap category. An institution that has received a supervisory rating of Marginal or Unsatisfactory, or has capital ratios within the Significantly or Critically Undercapitalized category would receive a *Below Standard* rating for creditworthiness and would not qualify for a positive net debit cap. A *Below Standard* rating would also be assigned if an institution received a supervisory rating of Fair and its capital ratios fall within the Undercapitalized category. In these situations, the primary supervisor will have communicated to the institution's directors and management its concerns with respect to capital, asset quality, or other

<sup>35</sup> Supervisory composite ratings, such as the Uniform Bank Rating System (CAMELS), are generally assigned on a scale from 1 to 5, with 1 being the strongest rating. Thus, for the purposes of the Creditworthiness Matrix, a supervisory rating of 1 is considered Strong; a rating of 2 is considered Satisfactory; a rating of 3 is considered Fair; and so on.

less than satisfactory conditions. Supervisory actions will also have been initiated requiring prompt corrective action in order to prevent further impairment of the institution's viability. For institutions whose supervisory composite rating is Strong or Satisfactory and whose capital ratios fall within the category of Undercapitalized, the institution must perform a full assessment of creditworthiness.

**Table VI – 2: Creditworthiness matrix for U.S. branches and agencies of foreign banks**

SOSA ranking <sup>36</sup>	U.S. Operations Supervisory Composite Rating*			
	<i>Strong</i>	<i>Satisfactory</i>	<i>Fair</i>	<i>Marginal or Unsatisfactory</i>
<i>SOSA 1</i>	Excellent	Very Good	Adequate	Below Standard
<i>SOSA 2</i>	Adequate	Adequate	**	Below Standard
<i>SOSA 3</i>	Below Standard	Below Standard	Below Standard	Below Standard

\* In situations where the FBO operates multiple branches and agencies in the United States, the U.S. Operations Supervisory Composite Rating should reflect the entire U.S. presence of the FBO. Because of the availability of supervisory ratings that reflect an FBO's entire U.S. presence, FBOs do not have to use Appendix A to incorporate an affiliates financial condition into the U.S. Operations Supervisory Rating.

\*\* Institutions that fall into this category should perform a full assessment of credit worthiness. A full self-assessment includes an assessment of capital adequacy, key performance measures (including asset quality, earnings performance, and liquidity), and the condition of affiliated institutions.

U.S. branches and agencies of foreign banks who are ranked SOSA 1 or 2 and whose U.S. Operations Supervisory Composite Rating is Strong, Satisfactory, or Fair will generally qualify for a positive net debit cap. However, institutions that are ranked SOSA 2 and whose U.S. Operations Supervisory Composite Rating is Fair will have to perform a full assessment of creditworthiness in order to qualify for a positive net debit cap. An institution that has received a SOSA ranking of 3 or whose U.S. Operations Supervisory Composite Rating is Marginal or Unsatisfactory would receive a *Below Standard* rating for creditworthiness and would not qualify for a positive net debit cap. In these situations, the primary supervisor will have communicated to the institution's directors and management its concerns with respect to capital, asset quality, or other less than satisfactory conditions.

<sup>36</sup> In October 2000, Strength of Support Assessment (SOSA) rankings were made available to foreign banking organizations' (FBOs) management and the FBOs' home country supervisor. For full text, see SR Letter 00-14 (SUP), *Enhancements to the Interagency Program for Supervising the U.S. Operations of Foreign Banking Organizations*, October 23, 2000.

*Affiliated institutions*

The Financial Institutions Reform, Recovery, and Enforcement Act of 1989 allows the Federal Deposit Insurance Corporation (FDIC) to hold an insured depository institution liable for any losses incurred from the failure of a commonly controlled institution. Thus, an institution could become insolvent should the deposit insurer elect to assess the institution the costs incurred from a failed commonly controlled institution. For depository institutions that are affiliates of a multi-bank holding company, the creditworthiness rating would be affected if the condition of one or more of the commonly controlled institutions is deemed Marginal or Unsatisfactory by the primary supervisor and one or more of these institutions represents a material portion of the organization's consolidated assets or materially affects the organization's consolidated operations. Appendix A contains worksheets that should be used to incorporate the condition of affiliates into the supervisory composite rating. This situation may arise when a supervisory agency discloses material operating or financial weakness within the parent company, or affiliated institutions, that pose significant risk to a depository institution. When such situations arise, the Reserve Bank will assign the depository institution a zero cap.

If the parent company and related affiliates are in satisfactory condition, no further adjustment needs to be made to the results of the institution's self-assessment. Such findings will normally be supported by evidence that the holding company serves as a source of strength to the depository institution; that is, it is willing and able to provide capital contributions or other managerial and financial support to the institution. If the management performing the assessment does not have the information needed for assessing the condition of affiliated institutions, it should confer with the financial officers of the holding company.

*U.S. branches and agencies of foreign banks*

A foreign banking organization (FBO) should undergo the same self-assessment process as a domestic bank in determining a net debit cap for its U.S. branches and agencies. U.S. branches and agencies of foreign banks, however, cannot be separated from the FBO. As a result, all of the U.S. offices of FBOs (excluding U.S.-chartered bank subsidiaries and U.S.-chartered Edge subsidiaries) should be treated as a consolidated family relying on the FBO's capital.

In addition, because many FBOs do not have the same management structure as U.S. depository institutions, the FBO may need to adjust its internal review of its self-assessment and cap category. If an FBO's board of directors has a more limited role in the bank's management than a U.S. board has, the self-assessment and cap category should be reviewed by senior management at the FBO's head office that exercises authority over the FBO equivalent to the authority exercised by a board of directors over a U.S. depository institution. In cases in which the board of directors exercises authority equivalent to that of a U.S. board, cap determination should be made by the board of directors.

In addition, for FBOs, the file that is made available for examiner review by the U.S. offices of an FBO should contain the report on the self-assessment that the management of U.S. operations made to the FBO's senior management and a record of the appropriate senior management's response or the minutes of the meeting of the FBO's board of directors or other appropriate management group, at

which the self-assessment was discussed.

Because the creditworthiness of the U.S. branch or agency of a foreign bank reflects the creditworthiness of the entire organization and the condition of the U.S. operations, the Federal Reserve's PSR program uses SOSA rankings and U.S. Operations Supervisory Composite Ratings to determine an FBO's creditworthiness. In addition, if the ARB is unable to obtain adequate information regarding the creditworthiness of the institution, the ARB may determine that a positive net debit cap is not appropriate.

*Supervisory examination and rating information relating to foreign banking organizations and domestically chartered institutions*

Examination reports and any correspondence from supervisory agencies regarding the institution's condition, including supervisory ratings and any of its components, are considered confidential information. Consequently, an institution's management must ensure that supervisory information is provided only to appropriate individuals within the depository institution, supervisory agencies, and Reserve Banks.

## **B. Intraday Funds Management and Control**

The purpose of the analysis of intraday funds management and control is to assess a depository institution's ability to fund its settlement obligations on a daily basis across all payment systems in which it participates. The analysis requires the involvement of funds management, credit, and operations personnel and a review of payments activity over a period of time. A Payment Flows Worksheet is provided in Appendix A (Table A-3) to assist depository institutions in analyzing their daily payment activity.

To obtain a complete understanding of its funds movements, an institution should have a good understanding of its daily use of intraday credit as well as its use of intraday credit on average over two-week periods. The analysis should cover a sufficient period of time so that an institution can determine its peak demand for intraday credit and can also establish its average use of such credit. The more volatile an institution's payments activity, the longer the interval that should be selected for analysis. The analysis will need to incorporate all operational areas with access to payments systems. In addition to large-dollar funds and book-entry securities transfer activity, the review should address check clearing, ACH, currency operations, and other payment activity that results in relatively large-value settlement obligations. Thus, the analysis should not be limited to on-line payment systems, nor should it be limited to payment systems to which the institution has on-line access. Additionally, institutions with direct access to Fedwire or other payment systems in more than one Federal Reserve District must combine all of these access points into a single integrated analysis.

In performing the analysis, the institution should consider both liquidity demands and the potential credit risks associated with participation in each payment system. The institution's capacity to settle its obligations in both routine and non-routine circumstances should be carefully assessed. Thus, a complete assessment of an institution's ability to control its intraday obligations extends, in many cases, beyond its ability to control its use of Federal Reserve intraday credit within the

constraints of its net debit cap. Rather, it extends to the institution's ability to control its position across all payment systems to a level that permits it to fund its obligations on a regular basis. This type of assurance requires an institution to understand fully the nature of its obligations and to establish systems that permit it to monitor daily activity and to respond to unusual circumstances.

#### *Liquidity requirements*

An institution participating on one or more large-dollar clearing and settlement systems must manage its position on each system, comply with net debit caps or other risk controls on each system, and assure itself that it has the capacity to satisfy all of its settlement obligations each business day. Other privately-operated, large-dollar systems used by depository institutions include the Clearing House Interbank Payments System (CHIPS) and Depository Trust Company (DTC).

To assess its average daily liquidity requirements, an institution participating on multiple systems should determine the magnitude and relative importance of the various payments flowing through its Federal Reserve account as well as the payments flowing over each privately-operated clearing and settlement system. For each payment service used, liquidity sources should be assessed to determine whether sufficient funding is regularly obtainable to satisfy obligations. In making this assessment, an institution should consider the creditworthiness of its counterparties as well as its customers. In addition, it should consider potential liquidity demands associated with the default of another participant in a privately-operated clearing and settlement arrangement, such as CHIPS, DTC, a local check clearinghouse, a privately-operated ACH system, an automated teller machine or point-of-sale network, or a credit card settlement arrangement. The institution's capability to obtain the necessary funding before the end of a business day in the event that a major counterparty, correspondent, customer, or member of a privately-operated clearing and settlement system were to default on its net settlement obligations is particularly important in this assessment.

For example, if a customer that is an active user of payment services and also a significant user of intraday credit were unable to cover its settlement obligations, a depository institution would need to be able to fund those obligations by the close of business on the given settlement day. Similarly, if a participant in a local check clearing arrangement were to default on its settlement obligation, it is likely the settlement for that arrangement would be recast and each of the other participants in the arrangement would experience a change in its net settlement obligation. Participants in such arrangements should review the rules of the arrangement and determine the credit and liquidity risks to which they are exposed. In each of these cases, management should ensure that it has the capability to obtain the necessary funding late in the day to cover such unexpected occurrences.

#### *Monitoring and control capabilities*

Once the payment environment has been defined, the institution should evaluate its account monitoring capability. Organizations that have branches operating in more than one Federal Reserve District and have more than one Federal Reserve account, such as U.S. branches and agencies of foreign banks, should determine how the institution's net debit cap will be allocated across its accounts, and each office maintaining a Federal Reserve account should be responsible for monitoring its account within the constraint of its cap allocation. At the same time, one office should be assigned

the responsibility to oversee consolidated payment activity, and the self-assessment should reflect the monitoring capability of the consolidated entity. The designated office will be expected to be knowledgeable of the payment activity at all offices and be able to respond to questions received from the Federal Reserve or the institution's primary supervisor.

Monitoring capabilities may be classified as real-time or periodic. A real-time monitoring system accounts for each large-dollar funds transfer, book-entry securities transfer, and net settlement entry as it is sent or received and recognizes "off-line" activity, such as check and ACH as data become available or in a manner that reflects the Federal Reserve's posting rules for payments settled through Federal Reserve accounts. Institutions participating on multiple large-dollar systems may use several monitoring systems to track activity. A periodic monitoring system provides balance information reflecting Fedwire funds and book-entry securities transfer activity or other large-dollar transactions, such as CHIPS messages, plus off-line transactions at specific intervals, such as every 15 minutes, 30 minutes, or hour.

### **C. Customer Credit Policies and Controls**

The assessment of an institution's customer credit policies and controls requires the following distinct analyses:

- An analysis of the institution's policies and procedures for assessing the creditworthiness of its customers, its counterparties, and its correspondents; and
- An analysis of the institution's ability to monitor the positions of individual customers and to control the amount of intraday and interday credit extended to each customer.

The analyses require the involvement of both credit and operations personnel and should focus on the creditworthiness of all customers, including corporate and other depository institutions, that are active users of payment services. In addition, the creditworthiness of correspondents and all counterparties on privately-operated clearing and settlement systems should be assessed.

For institutions that have arranged with a third-party service provider to process payments, it is recognized that certain operational controls may be established in either the funds and book-entry securities transfer operation of the service provider or the depository institution's own operation, depending on the nature of the arrangement. In any case, the standards for customer credit control and monitoring are to be applied uniformly and extended to the service provider's operation as appropriate.<sup>37</sup>

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<sup>37</sup> For more information, please see "Outsourcing of Information and Transaction Processing," SR Letter 00-4, February 29, 2000.



*General credit policies*

The assessment of credit policies is one of the most important components of the self-assessment because credit policies are essential in controlling the risks faced by the institution. The purpose of this analysis is to evaluate how effectively a depository institution controls the credit risk to which it is exposed in extending interday and intraday credit in connection with the provision of payment services to customers that maintain accounts with the institution. The section also addresses the credit risk faced by the institution from correspondents and counterparties on privately-operated clearing and settlement arrangements. There are several elements to the analysis. First, the institution's formal credit policies should be assessed. Second, customers that are active users of payment services should be identified, as well as the institution's correspondents and counterparties on privately-operated clearing and settlement systems. Third, the approach used to assess the creditworthiness of customers and correspondents as well as the method used to establish credit limits for counterparties on privately-operated clearing and settlement systems should be reviewed.

Sound credit policies should address all credit relationships the institution has with a customer, both explicit lending and intraday lending as a result of providing payment services. Fundamentally, the institution must establish:

- Formal, written credit policies that articulate sound credit standards that are approved by the institution's board of directors;
- Procedures to ensure that policies are communicated, understood, and faithfully executed; and
- Controls at the customer level to ensure that the credit evaluations of individual customers or decisions concerning limits on interday and intraday credit extensions are followed.

*Identification of customers, correspondents, and counterparties*

A depository institution should review its customers' payment activity to identify those customers that are active users of payment services. These customers should be classified according to the peak value of payments and the types of services used, such as large-dollar funds transfers, book-entry government securities transfers, other large-dollar securities services (such as commercial paper), ACH, and check. It is important to be familiar with the types of payments services that each customer uses because of the unique risks that various services may pose to the depository institution.

A depository institution should also review the financial condition of correspondents with which it transacts business such as clearing checks, obtaining securities safekeeping services, and obtaining securities transfer services. The institution should ensure, on a regular basis, that the financial condition of all correspondents is satisfactory. If signs of deterioration are observed, steps should be taken to reduce balances and the volume of activity conducted through the correspondent.

In addition, an institution should evaluate its counterparties on all large-dollar clearing and settlement systems that require participants to set bilateral credit limits with each other. Some clearing and settlement systems, such as securities depositories and ACH systems, manage the credit risk posed by participants centrally. In these systems, individual participants may not be able to control explicitly the exposure they face from other participants by setting credit limits. For these types of systems, institutions should assess the potential exposure they face due to a participant's default by assessing the value of transactions exchanged with other participants or the loss allocation methodology employed by the system. Institutions should ensure themselves that they have the ability to fund a change in their settlement position in the event that a participant on such a system were unable to settle.

#### *Assessment of customer, correspondent, and counterparty creditworthiness*

For all accountholders that are identified as being active users of payment services, whether they are financial institutions or corporate customers, the institution should evaluate each customer's creditworthiness and determine the amount of intraday credit it is willing to provide to each customer. The establishment of intraday credit limits should be consistent with the institution's overall relationship with the customer. In addition, such credit limits should be set conservatively and should not exceed a customer's typical payment needs, even if the customer has a very high credit rating. Credit limits should be comprehensive and cover all payments processed on behalf of each customer. Further, for customers that use ACH services or other services that create interday risk, interday credit limits (or prefunding requirements that would preclude credit extensions) for such services should be established as well.

If an institution deals with correspondents, the institution should determine the value of transactions cleared through each correspondent as well as other exposures that it faces from each correspondent and establish limits on those exposures that reflect the institution's assessment of the creditworthiness of each correspondent. In the case of counterparties on privately-operated large-dollar clearing and settlement systems, depository institutions should determine the amount of credit they are willing to extend to each of the other participants on the system. These limits should be set conservatively and they should take into consideration other exposures to the counterparty, such as correspondent and respondent relationships and other privately-operated systems on which the institution participates.

For accountholders as well as correspondents and counterparties on private clearing and settlement systems, changes in payment practices as well as changes in financial condition should be monitored on a regular basis. If changes are identified, steps should be taken to reassess credit limits, direct payment activity to other depository institutions, change bilateral credit limits, or modify the methods used to control the payment services provided to the institution.

#### *Monitoring customer activity*

Once the active customers have been identified, the systems used to monitor those customers' payment activity, both intraday and interday, should be reviewed. These systems need not be complex automated systems that fully integrate every transaction. Rather, the systems should monitor and control all significant transactions processed for the customer. It is reasonable to assume that all

large-dollar funds and book-entry securities transfers should be included in any monitoring system. If the customer collects high-dollar volumes of checks, uses the ACH mechanism extensively, makes large cash deposits, or is an active participant in securities markets, such activity should also be reflected in monitoring systems. Additionally, if it is decided not to include certain types of transactions in monitoring systems on a regular basis, procedures should be established to track other transactions that might materially affect the customers' use of intraday and interday credit.

In many depository institutions, separate monitoring systems have been established to monitor customer activity by type of business, such as funds activity or government securities activity, or to monitor each of a customer's accounts separately. While such approaches can be used to control risk through the allocation of credit limits among the various monitoring systems, they do not permit institutions to observe closely the aggregate position of a customer and to identify unusual behavior quickly. Attempts should be made to establish interfaces among diverse monitoring systems. Such interfaces could be achieved by providing access to all monitoring systems to the account officer or by designating a primary system to which data could be fed from other systems periodically to provide one consolidated view of customers' intraday and interday positions.

Intraday Payment Activity. Intraday monitoring systems should reflect the customer's opening balance at the beginning of the day, and material transactions should be posted to the account as information regarding the transactions becomes available throughout the day. If certain customers are required to pledge collateral to protect the institution providing credit to them, procedures should ensure that the collateral is acceptable. Monitoring systems should capture the market value or other assigned value of the collateral and ensure that intraday extensions of credit are adequately secured. Further, monitoring systems must have the capability to identify any transaction that would result in a credit limit being exceeded and to hold that transaction until an account officer reviews it and determines how the transaction should be handled.

To control the risk associated with clearing and settling for book-entry securities transfers, depository institutions should assess the creditworthiness of their customers and ensure that the customer has the ability to fund consistently its daily activity. In this respect, it is important for institutions to understand the intraday flows associated with their customer's book-entry securities activity in order to gain an understanding of peak funding needs. Depending upon the creditworthiness of the customer and the nature of the activity, a depository institution might require its customers to take any or all of the following steps:

- Advise the institution of anticipated incoming securities transfers.
- Prefund all such transfers, with the understanding that any transfer not prefunded may be returned.
- Collateralize all intraday overdrafts.

Interday Payment Activity. To control interday risk arising from the origination of ACH credit transactions, depository institutions should also establish interday monitoring systems. The credit limits in those systems should be set in conjunction with each customer's overall interday credit limit. Depository institutions should assess the creditworthiness of their customers on a periodic basis and ensure that the established credit limits continue to be appropriate. For customers in weak financial condition, institutions should have the capability to pend or reject, in real time, transactions that would exceed credit limits for these customers.

To control the return item risk associated with originating ACH debit transactions and collecting checks on behalf of customers, a depository institution should ensure itself that each customer has the capability to pay return items after it has been granted funds availability by the depository institution. In addition, if a customer's financial condition begins to deteriorate, the institution should analyze the customer's return item history and delay availability of funds or place holds on the account, as appropriate.

#### **D. Operating Controls and Contingency Procedures**

The purpose of the analysis of operating controls and contingency procedures is to assess the integrity and the reliability of a depository institution's payment operations to ensure that they are not a source of operating risk. The integrity of operations is of particular concern because operational errors and potential fraud can increase the cost of payment services and can undermine the confidence of the public in the payments mechanism. Similar results can occur if payment systems are unreliable and parties making and receiving payments do not have confidence that payments will be made on a timely basis.

The analysis of operating controls and contingency procedures is divided into two parts. The first part discusses the principal controls that depository institutions should use in payment processing to ensure that their operations are safe and secure. The second part discusses briefly the need for sound contingency procedures as a means of increasing payments system reliability.

##### *Controls over payment operations*

Institutions providing electronic payment services should be aware of and employ a comprehensive set of controls designed to ensure the integrity of payments and the processing system, limit access to devices and systems to authorized personnel, and prevent fraudulent or erroneous messages or payments from being initiated.

Within each broad category of controls there are numerous alternative solutions that may be employed depending on the technology available, staffing levels, and the nature of the customer base. The following discussion outlines the general controls that should be implemented, the rationale for each control, and some examples of typical control arrangements.

*Integrity of payments processing systems.* Virtually all electronic payments systems utilize computer software to process payments. Institutions should ensure that software is tightly controlled so

that it cannot be modified inadvertently or for fraudulent purposes. Methods of accomplishing this include (1) using dual controls for changes to the production environment; (2) conducting extensive user testing involving a wide range of test cases; (3) limiting the number of people who have access to the system to a necessary few; (4) ensuring that the version of software that is tested is, in fact, the version put into production; and (5) limiting access to system documentation only to authorized users.

*On-line access to the payments processing system.* Once an electronic payments system is put into production, the ability for employees or customers to initiate transactions should be strictly limited to authorized individuals. Furthermore, the accuracy and validity of payments created by authorized staff should be regularly monitored. Methods of accomplishing this include (1) limiting physical access to payment origination facilities, such as terminals; (2) using log-on IDs and passwords; (3) changing passwords regularly and making sure they are not written down or available to others; (4) using message authentication codes to ensure that payments are not altered during storage or transmission; (5) establishing dual controls over message creation (one person keys in, another person validates); and (6) maintaining good audit trails of payments originated and received.

*Off-line payment initiation and delivery processes.* Electronic payment fraud may result from poor controls over off-line payment initiation or delivery, where off-line refers to the use of telephones, letters, or facsimile machines. Institutions must ensure that messages originate from and are delivered to authorized parties. In all cases, message integrity must be maintained. Because access to a telephone or facsimile machine is difficult to control, the normal on-line access controls cannot be used. Consequently, institutions should use procedures such as (1) maintaining authorized lists of institution or customer personnel who can send or receive payments; (2) using controlled code words known only to the two parties; (3) using multi-party call-back procedures; (4) recording and monitoring telephone calls; and (5) using sequence numbering schemes for maintenance of audit trails.

*Authorized staff.* Care should always be taken to screen personnel employed in or with access to electronic payments areas, including programmers, analysts, computer operators, managers, clerical, and custodial staff. Management should have complete confidence in the honesty and integrity of all involved staff members. Controls, subject to appropriate statutes, that can be employed could include the following: pre-employment screening; ongoing monitoring of potential conflicts of interest; immediate removal from sensitive positions or system access of personnel who have resigned or been terminated; and specific security controls over access to offices and machines during non-business hours.

#### *Contingency procedures*

Despite the current level of automation and technology in use in the financial industry, situations arise that can cause significant interruptions in the provision of electronic payments services. These interruptions can entail outages of short duration, such as temporary losses of power and breaks in telecommunications, or longer, sometimes indefinite, outages, which may be caused by fire, flood, and earthquake. Such occurrences not only place an institution and its customers at risk, but also can have serious systemic risk implications in the case of a very large institution. When computer systems

are not operational during such events, account balances may be unavailable and normal investment and trading capabilities may be interrupted.

Contingency procedures should be devised to cover three main areas of exposure: (1) hardware and software systems; (2) data communications systems; and (3) physical operations facilities. The following paragraphs outline the general areas of consideration and provide some examples of typical control arrangements.

*Hardware and software systems.* Virtually any hardware or software system can experience problems that cause normal processing to stop. Institutions should devise and periodically test backup procedures to ensure that processing can be resumed on a sufficiently timely basis to minimize institutional risk.

Techniques that can be employed to mitigate this risk include the following: (1) redundant hardware and software to replace or take over operations from inoperable systems; (2) off-line backup plans, accommodating a limited number of key electronic files or payments; and (3) off-site disaster recovery facilities where computer operations can continue in case of a major outage.

*Data communications systems.* It is possible for telecommunications facilities to be unavailable to an institution even though computer systems are still running. Consequently, institutions should have back up facilities for all key data communications capabilities, including data security devices, to ensure that breaks in telecommunications service do not cripple the institution's operations and services. Techniques that can be used include backup leased or dial access lines to in-house systems, external networks, and key customer locations, spare or redundant equipment for such devices as modems, encryption boxes, and controllers, and off-line communications procedures, where feasible.

*Physical operations facilities.* Electronic funds transfer operating areas, including the area's desks, telephones, terminals, personal computers, copying machines, and facsimile machines, could be disabled in the event of a site disaster. Consideration should be given to the following options:

- Identifying an alternate physical facility into which operations staff can be relocated;
- Developing plans to acquire or use terminals, personal computers, and other necessary office equipment; and
- Installing and testing telecommunications capabilities to the backup site.

Minimizing operating risk in a contingency situation is a difficult task that requires significant advance planning. Plans should be fully documented, regularly reviewed, and tested to ensure that changes are accommodated over time, and all personnel are familiar with their responsibilities.

### **E. Overall Self-Assessment Rating**

Table VI-3, shown on the following page, integrates the components of the self-assessment into an overall self-assessment rating that indicates the institution's appropriate net debit cap category, subject to Reserve Bank approval.

**Table VI-3**  
Combined Assessment of Cap Category

<b>Credit-worthiness</b>	<b>Intraday Funds Management &amp; Control</b>	<b>Customer Credit Policies &amp; Controls</b>	<b>Operating Controls &amp; Contingency Procedures</b>	<b>Overall Assessment (Cap Category)</b>
Excellent	Strong	Strong	Satisfactory	<b>High</b>
Excellent	Strong	Satisfactory	Satisfactory	<b>Above average</b>
Excellent	Satisfactory	Strong	Satisfactory	<b>Above average</b>
Excellent	Satisfactory	Satisfactory	Satisfactory	<b>Above average</b>
Very good	Strong	Strong	Satisfactory	<b>Above average</b>
Very good	Strong	Satisfactory	Satisfactory	<b>Average</b>
Very good	Satisfactory	Strong	Satisfactory	<b>Average</b>
Very good	Satisfactory	Satisfactory	Satisfactory	<b>Average</b>
Adequate	Strong	Strong	Satisfactory	<b>Average</b>
Adequate	Strong	Satisfactory	Satisfactory	<b>Average</b>
Adequate	Satisfactory	Strong	Satisfactory	<b>Average</b>
Adequate	Satisfactory	Satisfactory	Satisfactory	<b>Average</b>
Below standard	Any rating	Any rating	Any rating	<b>Zero</b>
Any rating	Unsatisfactory	Any rating	Any rating	<b>Zero</b>
Any rating	Any rating	Unsatisfactory	Any rating	<b>Zero</b>
Any rating	Any rating	Any rating	Unsatisfactory	<b>Zero</b>



## **Appendix A: Self-Assessment Worksheets**

The procedures and worksheets in this Appendix were prepared for institutions to use as a basis for completing a self-assessment required to establish a daylight overdraft net debit cap in the Average, Above average, or High cap categories. Prior to performing the assessment, institutions should carefully review Section VI of this manual, which provides additional discussion of the components of the assessment. Appropriate documentation supporting the results of the assessment should be attached to all parts of the worksheets and kept on file for review by the institution's primary supervisor. Comments on various factors essential to the self-assessment may be attached as necessary, provided the comments reference the appropriate worksheet.

The index below indicates the location of the various components of the self-assessment including (1) creditworthiness, (2) intraday funds management and control, (3) customer credit policies and controls, and (4) operating controls and contingency procedures. Institutions normally must use the Creditworthiness Matrix method (1.A.), which relies on recent capital levels and supervisory examination ratings, to determine their creditworthiness rating. The full self-assessment of creditworthiness (1.B.) is permitted, or in some cases required, in certain circumstances. These circumstances, which are discussed further in Section VI of this manual, might include a significant change in financial condition, the availability of additional substantive information about the institution's financial condition not available at the time of the last examination, or a significant improvement in areas of concern to the primary supervisor since the last examination. All institutions should complete components (2), (3), and (4). Ratings for the four components should be recorded in Table A-4 to arrive at the institution's final self-assessment rating.

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## 1. Assessment of Creditworthiness

### 1.A. Creditworthiness Matrix Procedures for Domestically-chartered Institutions with Affiliates

#### *Supervisory Assessment*

Record the composite rating from the last supervisory examination in the upper portion of Table A-1.

#### *Capital Assessment*

Compare the institution's capital ratios to thresholds established under Section 38 of the Federal Deposit Insurance Corporation Improvement Act of 1991 (FDICIA) for the Capital Zones for Prompt Corrective Action and record the results in the upper portion of Table A-1.

#### *Condition of Affiliates*

The condition of the holding company and related affiliates must be considered in the analysis of the depository institution's condition. In the evaluation of the condition of an institution's parent company and affiliates, emphasis should be placed on the most recent supervisory ratings of the affiliated institutions. It is recognized that management may not have the information needed for assessing the condition of affiliated institutions. In such situations, management should confer with the financial officers of the holding company.

The condition of the parent company or affiliated institutions will have either a neutral or negative impact on the institution completing the assessment. If the parent company and related affiliates are in satisfactory condition, no further adjustment needs to be made to the results of the institution's self-assessment. Such findings will normally be supported by evidence that the holding company serves as a source of strength to the depository institution; that is, it is willing and able to provide capital contributions or other managerial and financial support to the institution.

The creditworthiness rating of a depository institution would be adjusted to *Below Standard* if the condition of one or more of the commonly controlled institutions was deemed Marginal or Unsatisfactory by the primary supervisor and the institution or institutions represent a material position of the organization's consolidated assets or materially affects the organization's consolidated operations. This situation may arise when a supervisory agency discloses material operating or financial weakness within the parent company or affiliated institutions that poses significant risk to the depository institution. When such situations arise, the institution will not qualify for a positive net debit cap.

- If the supervisory rating of affiliates is Marginal or Unsatisfactory, the assigned rating is *Negative*.

- If the supervisory rating of affiliates is Fair or better, the assigned rating is *Neutral* and will not result in an upgrade or downgrade of the other factors.

<b>Condition of Affiliates Rating:</b>	
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#### *Overall Creditworthiness Rating*

Institutions should determine their creditworthiness rating by selecting the overall creditworthiness rating in the right-hand column of Table A-1 that corresponds to their ratings in the other columns for their supervisory and capital assessments and the condition of their affiliates. If the Creditworthiness Matrix reflects an overall rating of *Adequate* or above, the institution should record its creditworthiness rating in Table A-4 (on page A-34) and proceed to complete the remaining components of the self-assessment.

In some instances, the Creditworthiness Matrix result will indicate that a full assessment of creditworthiness is appropriate, in which case the institution should not record the rating from the Matrix in Table A-1, but should instead complete the procedures under part 1.B. of this section. If the Creditworthiness Matrix shows an overall rating of *Below Standard* and the institution cannot justify completing the full assessment of creditworthiness, the institution does not qualify for a positive daylight overdraft cap and need not complete the remainder of the assessment.

**Table A-1**  
Creditworthiness Matrix Summary

<b>PRIMARY MEASURES</b>	
SUPERVISORY ASSESSMENT:	
CAPITAL ASSESSMENT:	
CONDITION OF AFFILIATES ASSESSMENT:	

<b>Supervisory Assessment</b>	<b>Capital Levels</b>	<b>Condition of Affiliates</b>	<b>Overall Creditworthiness</b>
Strong	Well Capitalized	Neutral	<b>Excellent</b>
Strong	Adequately Capitalized	Neutral	<b>Very Good</b>
Strong	Undercapitalized	Neutral	***
Satisfactory	Well Capitalized	Neutral	<b>Very Good</b>
Satisfactory	Adequately Capitalized	Neutral	<b>Very Good</b>
Satisfactory	Undercapitalized	Neutral	***
Fair	Well Capitalized	Neutral	<b>Adequate</b>
Fair	Adequately Capitalized	Neutral	<b>Adequate</b>
Fair	Undercapitalized	Neutral	<b>Below Standard</b>
Marginal	Any Level	Any Rating	<b>Below Standard</b>
Unsatisfactory	Any Level	Any Rating	<b>Below Standard</b>
Any Rating	Significantly Undercapitalized	Any Rating	<b>Below Standard</b>
Any Rating	Critically Undercapitalized	Any Rating	<b>Below Standard</b>
Any Rating	Any Level	Negative	<b>Below Standard</b>

\*\*\* Full assessment of creditworthiness must be performed.

<b>Overall Creditworthiness Rating:</b>	
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## **1.B. Full Assessment of Creditworthiness Procedures**

The following discussion covers the recommended method for completing the full assessment of creditworthiness. The accompanying worksheets should serve as a guide in completing this assessment. Institutions should record their ratings on these worksheets and in the upper portion of Table A-2.

There are three factors that must be considered in assessing creditworthiness: 1) capital adequacy; 2) key performance measures, including asset quality, earnings performance, and liquidity; and 3) the condition of affiliated institutions. In the self-assessment documentation, each factor should be discussed separately and the rationale used to adjust or maintain the overall creditworthiness rating should be explained. Exceptions or special considerations pertaining to the evaluation must be discussed and documented for supervisory examiners.

An assessment that differs significantly from findings of the primary supervisor should be particularly well documented and supported. It may be helpful to refer to the supervisor's examination manuals for a description of the rating guidelines and procedures used to assess an institution's condition. However, regardless of the results of the creditworthiness assessment, the creditworthiness rating achieved is not necessarily related to or reflective of the rating that would result from a regulatory examination. It should also be noted that the numerical benchmarks for certain performance standards contained in these self-assessment procedures may be subject to change.

In developing the assessment, the institution should compare its performance to selected ratios and peer comparisons that are well recognized as performance standards by the banking industry to determine its creditworthiness rating. The self-assessment may use information derived from confidential internal sources, publicly available reports, or both. Some common sources that provide the information needed for the creditworthiness assessment include supervisory examination reports, management financial reports, supervisory performance summaries, internal and external audit reports, rating agency reviews, and private vendor performance summaries. Performance summary reports, such as the Uniform Bank Performance Report (UBPR) and the Bank Holding Company Performance Report (BHCPR), provide current and historic financial peer data.<sup>38</sup> Also, similar information is available from bank trade associations, public accounting firms, rating agencies, and other private vendors.

A depository institution's performance should be assessed in relation to its percentile ranking within the peer group. Care should be exercised when choosing an appropriate peer group. Peer groups that are primarily of a regional nature are not appropriate if that region is experiencing economic conditions that result in a lower performance for the peer group as a whole. In such

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<sup>38</sup> The UBPR and the BHCPR are available at <http://www.ffiec.gov/>.

situations, it is appropriate to use a national peer group. Strong performance may be indicated by a high percentile when certain measures of earnings and capital are analyzed, or a low percentile when certain asset quality and liquidity measures are considered. Also, when evaluating the relative rankings, both current performance and performance trends should be considered.

The following guidelines indicate appropriate ratings for performance relative to the peer group:

- *Excellent* - Performance consistently at or above the 75th percentile, and most key measures above the 90th percentile;
- *Very Good* - Performance consistently above the 55th percentile, and most key measures above the 75th percentile;
- *Adequate* - Performance consistently above the 35th percentile, and most key measures near peer averages. No significant measures in the lowest 10th percentile, or below standards set by supervisory authorities; and
- *Below Standard* - Performance measures consistently below average, and significant weakness in one or more key measures.

An institution must justify and fully document any rating that is not consistent with the above criteria. Greater emphasis should also be placed on comparisons to supervisory standards when peer group norms reflect performance well below supervisory standards. Should the peer group comparison result in a *Below Standard* rating, the appropriate creditworthiness rating is also *Below Standard*.

It is recognized that only limited peer data are available for U.S. branches and agencies of foreign-based banks. In such instances, the institution should refer to similar data used for U. S. banking institutions. In making such comparisons, differences with respect to accounting principles and financial practices should be considered when interpreting relative performance.

***1.B.i. Capital Adequacy***

In most cases, the FDICIA Capital Zones for Prompt Corrective Action will apply as the Regulatory Standard and general baseline for the capital adequacy component of the assessment of creditworthiness. Even for institutions that are not subject to risk-based capital requirements, or for those that believe that a higher capital adequacy rating than that currently indicated by the capital zones is warranted, these zones should be used as a guide in developing the capital adequacy rating.

If an institution's capital levels are below any of the federal guidelines, the appropriate self-assessment rating for creditworthiness is usually *Below Standard*. A depository institution may provide information to the supervisory agencies and appropriate Reserve Bank to support a higher rating. In such cases, an institution will not receive an overall creditworthiness rating better than *Adequate*. For instance, if an institution's capital ratios are below the Regulatory Standard but the institution has firm plans to increase its capital, it may adjust its ratios upward; however, evidence supporting the upward adjustment to the institution's original ratios should be fully documented. In addition, the capital adequacy rating should be adjusted downward if capital has declined since the last examination or if management anticipates that capital will decline to below minimum acceptable levels.

A foreign bank that is not based in a country that adheres to the Basle Capital Accord should compare capital ratios calculated under home country rules to the Regulatory Standard and document analysis that supports a conclusion that its capital meets or exceeds the standard. In addition, if other minimum capital ratios are prescribed by any of the supervisory agencies, the depository institution must address its level of compliance with such measures as well.



### Capital Adequacy Worksheet

	<b>Institution (original)</b>	<b>Institution (adjusted*)</b>	<b>Regulatory Standard</b>	<b>Peer</b>
Tier I Capital/Risk Weighted Assets			4.0%	
Total Capital/Risk Weighted Assets			8.0%	
Tier I Capital/Total Assets			3.0%	
Other Ratios:				

\* If the institution's original capital ratios were adjusted for any reason, fully document the calculations and assumptions used to perform the adjustment.

Based on the institution's original or adjusted capital levels, what is the highest capital zone at or above which the institution is expected to remain for the next twelve months?

- ☐ Well Capitalized  
☐ Adequately Capitalized  
☐ Undercapitalized  
☐ Significantly Undercapitalized  
☐ Critically Undercapitalized

<b>Capital Adequacy Rating:</b>	
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### ***1.B.ii. Key Performance Measures***

#### **Asset Quality**

Asset quality is often based on the level and trend of non-performing and classified assets. Such information is available from internal management reports, supervisory examination reports, and external audit summaries. It is recognized that only limited information may be available for peer group comparisons. However, provided that such information is current, supervisory examination findings and comparisons pertaining to asset quality may serve as a starting point.

For example, the level and trend of weighted classified assets as noted in the last supervisory examination report should be reviewed. This measure reflects the probability of loss that has not yet been recognized. Weighted classified assets is defined as the sum of (1) 20 percent of substandard, (2) 50 percent of doubtful, and (3) 100 percent of loss classifications not already charged off. The dollar amount of weighted classified assets should be compared to Tier I capital plus the loan loss reserve. The institution's ratio of total classified assets to total capital should also be reviewed. Total classified assets is defined as the sum of all substandard, all doubtful, and all loss classifications not already charged off. The total of classified assets should be compared to Tier I capital plus the loan loss reserve. In particular, the level and severity of classifications should be carefully evaluated, as well as the trends in both the classification categories and ratio itself. The assessment of this ratio should be a useful analytical complement to the weighted classification ratio.

Additionally, the level of "other real estate" owned as a percent of average assets available, which is also an indicator of an institution's asset quality, should be considered. Normally, unacceptable levels of other real estate owned will adversely impact earnings performance. An institution exhibiting a negative trend with respect to other real estate or with levels consistently above their peer group should assign a *Below Standard* rating to this area. Institutions with levels consistently below their peer group or institutions exhibiting a positive trend would not need to adjust their rating.

Levels of delinquent, non-performing, and non-accrual loans as a percentage of total loans or as a percentage of the allowance for loan and lease losses should be reviewed. These measures should then be compared with supervisory standards and peer group norms. Ratings assigned to asset quality would be derived by referring to the guidelines described in this Section regarding peer group comparisons. Other considerations that should be factored into the evaluation of asset quality include management's demonstrated ability to collect problem credits, an assessment of credit concentrations to particular industries or geographic regions, adequacy of loan loss reserves, and changes in lending policies and practices.

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**Asset Quality Worksheet**

Review the level and trend of weighted classified assets, as disclosed in the last regulatory examination. In the absence of data for current weighted classified assets, review the level and trend of non-current loans as a percentage of total loans and as a percentage of the allowance for loan losses. These measures reflect the potential for loss within the institution.

Institutions whose most recent examination was within 12 months should use the first method, below, to determine their rating. Other institutions should use the second method.

1. If the most recent examination was less than 12 months from the current date, compare the weighted classified asset ratio (weighted classified assets to Tier I capital plus loan loss reserve) with the following criteria to determine the institution's rating.

<b>Institution</b>	<b>Weighted Classified Ratio</b>	<b>Rating</b>
	< 5%	Excellent
	> 5% to 15%	Very good
	> 15% to 30%	Adequate
	> 30%	Below standard

### Asset Quality Worksheet – continued

2. If the examination data are unavailable or older than 12 months calculate the following ratios:

	Ratio	Peer	Percentile
Non-current loans/total loans:			
Non-current loans/loan loss allowance.:			
Total classified assets/total capital:			
Other real estate/total assets:			

Compare these ratios with the following table to determine the institution's rating.

Percentile	Rating
< 10th	Excellent
> 10th to 25th	Very good
> 25th to 50th	Adequate
> 50th	Below Standard

<b>Asset Quality Rating:</b>	
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### **Earnings Performance**

The evaluation of earnings performance relies heavily upon comparisons of key profitability measures (such as return on assets and return on equity) to industry benchmark and peer group norms. Important considerations in the evaluation of earnings are quantity, quality, and trend. Also, a number of other factors, such as the level of non-recurring items, exposure to interest rate movements, coverage of potential loan losses or losses on other assets, and overhead must be factored into the evaluation process. The following worksheet should assist in the evaluation of return on assets.

An institution experiencing negative earnings should assign a rating of *Below Standard* to this area. An *Excellent* or a *Very Good* rating is reserved for institutions that exhibit strong, consistent earnings performance relative to supervisory standards and their peer group and have no material weakness disclosed by their primary supervisor.

**Earnings Performance Worksheet**

	<b>Institution</b>	<b>Peer</b>	<b>Percentile</b>
ROA:	%	%	%
Adjusted ROA:	%	%	%

Compare the institution's return on assets to the following benchmarks:

<b>ROA Benchmarks:</b>					
	<b>Asset Size</b>				
<b>Rating</b>	<b>&lt; \$100 Million</b>	<b>\$100-\$300 Million</b>	<b>\$300-\$1,000 Million</b>	<b>\$1-\$5 Billion</b>	<b>Over \$5 Billion</b>
Excellent	1.15%	1.05%	0.95%	0.85%	0.75%
Very good	0.95	0.85	0.75	0.65	0.55
Adequate	0.75	0.65	0.55	0.45	0.35
Below standard	<0.75	<0.65	<0.55	<0.45	<0.35

<b>Earnings Performance Rating:</b>	
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## **Liquidity**

An evaluation of liquidity involves a determination of the stability of the depository institution's retail and wholesale funding sources as well as its ability to cover large unexpected funding outflows. The assessment should include a review of the institution's historical and current funding patterns, level of non core funding, ability to access the money markets, and adequacy of contingency liquidity plans. The following worksheet should facilitate the evaluation of the institution's dependency on non core funding sources.

An *Adequate* rating may be assigned when liquidity measures are near peer group levels and no material concerns have been disclosed by the primary supervisor. If undue reliance is placed on non core funding, a *Below Standard* rating is warranted. In addition, this rating may apply when access to traditional funding sources declines due to market concerns regarding the institution's condition. *Excellent* or *Very Good* ratings are reflective of institutions that have strong funds management abilities, ready access to alternative funding sources, and adequate controls for managing asset and liability risks.

### Liquidity Worksheet

	Institution	Peer	Percentile
Net non core funding dependency ratio:			

Compare the institution's net non core funding dependency ratio with the data in the following table.

Percentile	Rating
< 10th	Excellent
> 10th to 25th	Very Good
> 25th to 50th	Adequate
> 50th	Below Standard

<b>Liquidity Rating:</b>	
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**1.B.iii. Condition of Affiliated Institutions**

The condition of the holding company and related affiliates must be considered in the analysis of the depository institution's condition. In the evaluation of the condition of an institution's parent company and affiliates, emphasis should be placed on the most recent supervisory ratings of the affiliated institutions. It is recognized that management may not have the information needed for assessing the condition of affiliated institutions. In such situations, management should confer with the financial officers of the holding company.

The condition of the parent company or affiliated institutions will have either a neutral or negative impact on the institution completing the assessment. If the parent company and related affiliates are in satisfactory condition, no further adjustment needs to be made to the results of the institution's self-assessment. Such findings will normally be supported by evidence that the holding company serves as a source of strength to the depository institution; that is, it is willing and able to provide capital contributions or other managerial and financial support to the institution.

The creditworthiness rating of a depository institution would be adjusted to *Below Standard* if the condition of one or more of the commonly controlled institutions was deemed Marginal or Unsatisfactory by the primary supervisor and the institution or institutions represent a material position of the organization's consolidated assets or materially affects the organization's consolidated operations. This situation may arise when a supervisory agency discloses material operating or financial weakness within the parent company or affiliated institutions that poses significant risk to the depository institution. When such situations arise, the institution will not qualify for a positive net debit cap.

- If the supervisory rating of affiliates is Marginal or Unsatisfactory, the assigned rating is *Negative*.
- If the supervisory rating of affiliates is Fair or better, the assigned rating is *Neutral* and will not result in an upgrade or downgrade of the other factors.

<b>Condition of Affiliates Rating:</b>	
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***1.B.iv. Integrating the Three Factors***

In integrating the three factors (capital adequacy, key performance measures, and the condition of affiliated institutions) into a single assessment, institutions should use Table A-2. In general, the rating assigned to key performance measures will not exceed the lowest of the ratings for the three measures. Similarly, the ratings assigned to creditworthiness should not normally exceed the ratings of any of the three factors. In general, because the factors are interrelated, the ratings of the factors should correspond closely to the overall creditworthiness rating. For example, a depository institution that has one of the key performance measures rated *Below Standard* will be expected to have overall creditworthiness rated *Below Standard*. Usually, poor asset quality or operating losses will reduce capital to *Below Standard* levels and, as a result, the overall creditworthiness rating should be assigned accordingly. In situations in which an institution's capital ratios were below the Regulatory Standard but the rating for capital adequacy was adjusted upward based on other factors, the overall creditworthiness rating assigned should not be greater than *Adequate*.

In addition, the overall rating for creditworthiness should be adjusted to reflect factors that could have a material impact on the institution's financial condition. Other factors that may contribute to the assignment of the overall rating might include the following:

- Major changes in the institution's management;
- Material prospective losses or recoveries;
- Depressed or materially improved economic conditions in the institution's primary operating location; or
- Political developments in foreign countries where the institution has considerable interests.

If the Table A-2 indicates an overall creditworthiness rating of *Below Standard*, the institution does not qualify for a positive daylight overdraft cap and need not complete the remainder of the assessment.

**Table A-2**  
Creditworthiness Self-Assessment Summary

PRIMARY MEASURE		
	CAPITAL ADEQUACY ASSESSMENT:	
KEY PERFORMANCE MEASURES		
	ASSET QUALITY ASSESSMENT:	
	EARNINGS STRENGTH ASSESSMENT:	
	LIQUIDITY ASSESSMENT:	
KEY PERFORMANCE MEASURES RATING:*		
CONDITION OF AFFILIATES ASSESSMENT:		

\* (Equals the lowest of the ratings for the three performance measures.)

Capital Adequacy	Key Performance Measures	Condition of Affiliates	Overall Creditworthiness
Well Capitalized	Excellent	Neutral	Excellent
Adequately Capitalized	Excellent	Neutral	Very Good
Well Capitalized	Very Good	Neutral	Very Good
Adequately Capitalized	Very Good	Neutral	Very Good
Well Capitalized	Adequate	Neutral	Adequate
Adequately Capitalized	Adequate	Neutral	Adequate
Undercapitalized	Any Rating	Any Rating	Below Standard
Significantly Undercapitalized	Any Rating	Any Rating	Below Standard
Critically Undercapitalized	Any Rating	Any Rating	Below Standard
Any Rating	Below Standard	Any Rating	Below Standard
Any Rating	Any Rating	Negative	Below Standard

<b>Overall Creditworthiness Rating:</b>	
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**2. Assessment of Intraday Funds Management and Control**

The purpose of the analysis of intraday funds management and control is to assess an institution's ability to fund its settlement obligations on a daily basis across all payments systems in which the institution participates. The analysis should include input from personnel in the funds management, credit, and operations areas and should involve a review of payment flows activity over a period of time. The Payment Flows Worksheet (Table A-3) is provided as a model to assist institutions in analyzing their intraday payment activity. To the extent that an institution uses other payment services that require large-dollar settlements, the worksheet should be expanded to include them.

Yes No

1. Based on data for the institution's daily payment flows, is the institution able to fund its positions on each payment system in which it participates even if a major counterparty, customer, correspondent, or participant in a clearing arrangement defaulted?  

\_\_\_\_\_
2. Does the institution's system for monitoring its positions on payments systems capture:
  - a. At least 95 percent of the dollar value of all payments processed at least every 15 minutes?  

\_\_\_\_\_
  - b. At least 80 percent of the dollar value of all payments processed at least every 30 minutes?  

\_\_\_\_\_
  - c. Less than 80 percent of the dollar value of all payments less than every 30 minutes?  

\_\_\_\_\_

**Rating of Intraday Funds Management and Control:**

- A *Strong* rating is appropriate if the answers to questions 1 and 2a are yes.
- A *Satisfactory* rating is appropriate if the answers to questions 1 and 2b are yes.
- An *Unsatisfactory* rating results if the answer to question 1 is no or if the answer to question 2c is yes.

<b>Intraday Funds Management and Control Rating:</b>	
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**Table A-3**  
**Payment Flows Worksheet**  
 (Daily average dollar value)

Payment Type	\$ Paid	% of Total	\$ Rec'd	% of Total
<b>A. Federal Reserve Account</b>				
1. Fedwire				
a. Funds				
b. Book-Entry Securities				
2. Checks				
a. Through Federal Reserve				
b. Through Clearinghouses <sup>1</sup>				
3. ACH Transactions				
a. Through Federal Reserve				
i. Credit Payments				
ii. Debit Payments				
b. Through Private ACH Systems <sup>1</sup>				
4. Currency and Coin				
5. Other				
<b>Subtotal - Federal Reserve Account Activity</b>				
<b>B. Through Correspondent Accounts</b>				
1. Check Transactions				
2. Other Transactions				
<b>C. Privately Operated Networks<sup>2</sup></b>				
1. CHIPS				
2. DTC				
3. Other				
<b>Total</b>		<b>100%</b>		<b>100%</b>

<sup>1</sup> Daily average net settlement entry, net debit or net credit.

<sup>2</sup> If Fedwire funds transfers are used to settle obligations of private clearing and settlement arrangements, the value of those settlement transfers should be deducted from Fedwire funds transfer totals and reflected in the appropriate category.

### 3. Assessment of Customer Credit Policies and Controls

	<u>Yes</u>	<u>No</u>
<b>3.A. Assessment of Credit Policies</b>		
1. Have formal, written credit policies been developed that articulate sound credit standards?	_____	_____
2. Do the credit policies address interday and intraday credit extensions?	_____	_____
3. Have the credit policies been approved by the institution's board of directors?	_____	_____
4. Are the policies reviewed on a periodic basis?	_____	_____
5. Have the procedures been communicated to all employees charged with executing them?	_____	_____

#### Rating of Credit Policies:

- If the answers to questions 1 through 5 are yes, a *Satisfactory* rating is appropriate.
- If the answer to any of the preceding five questions is no, an *Unsatisfactory* rating should be assigned.

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**3.B. Assessment of Customer, Correspondent, and Counterparty Creditworthiness**

- |   | <u>Yes</u> | <u>No</u> |
|---|------------|-----------|
| 1. Have credit assessments of customers, correspondents, and counterparties that result in the establishment of credit limits or limits on the institution's exposure been performed within the last 12 months? | _____      | _____     |
| 2. Do procedures ensure that significant changes in the financial condition of customers, correspondents, and counterparties are identified and considered in current credit limits?                            | _____      | _____     |

Rating of Customer, Correspondent, and Counterparty Creditworthiness Assessments:

- A *Satisfactory* rating is appropriate if the answers to questions 1 and 2 are yes.
- An *Unsatisfactory* rating is appropriate if the answer to either question 1 or question 2 is no.

**3.C. Monitoring Customer and Counterparty Intraday Payment Activity**

		<u>Yes</u>	<u>No</u>
1.	Do customer and counterparty monitoring systems:		
a.	Capture all significant transactions at least every 15 minutes?	_____	_____
b.	Capture 80 percent of significant transactions at least every 30 minutes?	_____	_____
c.	Capture less than 80 percent of significant transactions less than every 30 minutes?	_____	_____
2.	If customers are required to pledge collateral for intraday extensions of credit:		
a.	Do systems ensure that all intraday extensions of credit are fully secured?	_____	_____
b.	Do procedures ensure that collateral reasonably reflects market values?	_____	_____
c.	Do procedures ensure that only eligible collateral is used to support intraday extensions of credit?	_____	_____
3.	Do monitoring systems reject or pend transactions when credit limits are breached or when collateral is insufficient?	_____	_____
4.	Are such transactions only released for processing after approval of a credit officer?	_____	_____
5.	If the institution participates in large-dollar clearing and settlement arrangements, is any transaction that would breach a bilateral credit limit pended or rejected?	_____	_____



### Monitoring Customer and Counterparty Intraday Payment Activity-continued

Rating Customer Intraday Monitoring:

- If the answers to question 1a and questions 2a through 5 are yes, a *Strong* rating is appropriate.
- If the answers to question 1b and questions 2a through 5 are yes, a *Satisfactory* rating is appropriate.
- If the answer to question 1c is yes or the answer to any of questions 2a through 5 is no, the rating is *Unsatisfactory*.

### 3.D. Monitoring Customer Interday Payment Activity

- |    |  | <u>Yes</u> | <u>No</u> |
|----|--|------------|-----------|
| 1. | Do interday monitoring systems for ACH credit transactions capture:  |            |           |
| a. | 100 percent of the value of ACH credit transactions originated by settlement date?   | _____      | _____     |
| b. | At least 80 percent of the value of ACH credit transactions originated by settlement date?   | _____      | _____     |
| c. | Less than 80 percent of ACH credit transactions originated by settlement date?   | _____      | _____     |
| 2. | Do monitoring systems for ACH credit transactions pend or reject transactions in real time that would cause limits (including collateral) to be breached for customers that have been identified by a credit assessment to be in weak financial condition? | _____      | _____     |
| 3. | Do monitoring systems track return item exposure (check and ACH debit transactions) for financially weakened customers?  | _____      | _____     |

Rating Customer Interday Payment Activity:

- A *Strong* rating is appropriate if the answers to questions 1a, 2, and 3 are yes.
- A *Satisfactory* rating is appropriate if the answers to questions 1b, 2, and 3 are yes.
- An *Unsatisfactory* rating results if the answer to question 1c is yes or the answers to questions 2 or 3 are no.

**3.E. Overall Rating: Customer Credit Policies and Controls**

The matrix below should be used to combine the ratings for the sections of this component into an overall rating for the self-assessment.

<b>Credit Policies</b>	<b>Customer &amp; Counterparty Creditworthiness</b>	<b>Monitoring Intraday Payment Activity</b>	<b>Monitoring Interday Payment Activity</b>	<b>Overall Customer Credit Policies and Controls Rating</b>
Satisfactory	Satisfactory	Strong	Strong	<b>Strong</b>
Satisfactory	Satisfactory	Satisfactory	Strong	<b>Satisfactory</b>
Satisfactory	Satisfactory	Strong	Satisfactory	<b>Satisfactory</b>
Satisfactory	Satisfactory	Satisfactory	Satisfactory	<b>Satisfactory</b>
Unsatisfactory	Any Rating	Any Rating	Any Rating	<b>Unsatisfactory</b>
Any Rating	Unsatisfactory	Any Rating	Any Rating	<b>Unsatisfactory</b>
Any Rating	Any Rating	Unsatisfactory	Any Rating	<b>Unsatisfactory</b>
Any Rating	Any Rating	Any Rating	Unsatisfactory	<b>Unsatisfactory</b>

<b>Overall Customer Credit Policies and Controls Rating:</b>	
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#### 4. Assessment of Operating Controls and Contingency Procedures

##### 4.A. Internal Operating Controls

Yes No

1. Are controls in place to prevent the unauthorized initiation of a transaction or the unauthorized payment of a transaction? \_\_\_\_\_

Areas that should be considered in answering this question include the following:

- Are appropriate controls used for protecting sensitive data when dial-in mechanisms are used (e.g., dial-back; encryption; access cards)?
- Does the system software provide for implementation and enforcement of the data access rules and provide audit trails of all system access?
- Are user IDs or terminals shut down after a predetermined number of unsuccessful attempts to access the system?
- Are confidential passwords used and do they provide the basis for individual accountability or system use?
- Are password administration procedures defined and followed (e.g., proper authorization of each new user; password suspension if user terminated; etc.)?

2. Are requests for off-line payment processing authenticated before transactions are processed? \_\_\_\_\_

3. Are payment application programs logically secure and is update access restricted to authorized change management software? \_\_\_\_\_

Areas that should be considered in answering this question include the following:

- Do controls exist that prevent unauthorized access to production data files, program libraries, and system libraries?

**Internal Operating Controls - continued**

- Are password files, authorization tables, communications software, and key application programs stored in protected areas or otherwise protected from read and write access?
  
- 4.     Are steps taken to ensure the honesty and integrity of all involved staff members?

\_\_\_\_\_

Rating Internal Operating Controls:

- If the answers to questions 1 through 4 are yes, a *Satisfactory* rating is appropriate.
  
- If the answer to one or more of questions 1 through 4 is no, an *Unsatisfactory* rating is appropriate.

<b>Internal Operating Controls Rating:</b>	
--	--

**4.B. Contingency Procedures**Yes No

1. Has senior management worked with automation management to establish a contingency plan? \_\_\_\_\_

Areas that should be considered in answering this question include the following:

- Does the contingency plan include participation from all relevant functional areas within the organization?
- Does the contingency plan incorporate a detailed notification procedure specifying who should be notified of emergencies?
- Does the plan categorize and provide specific procedures for different disasters?

2. Does the plan address moving to an off-site facility or have arrangements been made with a third-party for the continuation of vital operations during an outage? \_\_\_\_\_

3. Have backup considerations such as contingency site selection, contingency site hardware (computers, peripherals, terminals), and contingency site software (compatibility, storage, testing) been addressed? \_\_\_\_\_

4. Is the contingency plan periodically tested and does testing occur on at least an annual basis? \_\_\_\_\_

Rating Contingency Procedures:

- A *Satisfactory* rating is appropriate if the answers to questions 1 through 4 are yes.
- An *Unsatisfactory* rating is the result if the answer to any of the four preceding questions is no.

<b>Contingency Procedures Rating:</b>	
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#### **4.C. Overall Rating: Operating Controls and Contingency Procedures**

If the rating for either internal operating controls or contingency procedures is *Unsatisfactory*, then an *Unsatisfactory* rating results for this overall component. Otherwise, the rating is *Satisfactory*.

<b>Operating Controls and Contingency Procedures Rating:</b>	
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## 5. Combining the Four Components

The individual component evaluations should be combined into an overall assessment using Table A-4 below.

**Table A-4**  
Combined Assessment of Cap Category

<b>Credit-worthiness</b>	<b>Intraday Funds Management &amp; Control</b>	<b>Customer Credit Policies &amp; Controls</b>	<b>Operating Controls &amp; Contingency Procedures</b>	<b>Overall Assessment (Cap Category)</b>
Excellent	Strong	Strong	Satisfactory	<b>High</b>
Excellent	Strong	Satisfactory	Satisfactory	<b>Above Average</b>
Excellent	Satisfactory	Strong	Satisfactory	<b>Above Average</b>
Excellent	Satisfactory	Satisfactory	Satisfactory	<b>Above Average</b>
Very good	Strong	Strong	Satisfactory	<b>Above Average</b>
Very good	Strong	Satisfactory	Satisfactory	<b>Average</b>
Very good	Satisfactory	Strong	Satisfactory	<b>Average</b>
Very good	Satisfactory	Satisfactory	Satisfactory	<b>Average</b>
Adequate	Strong	Strong	Satisfactory	<b>Average</b>
Adequate	Strong	Satisfactory	Satisfactory	<b>Average</b>
Adequate	Satisfactory	Strong	Satisfactory	<b>Average</b>
Adequate	Satisfactory	Satisfactory	Satisfactory	<b>Average</b>
Below Standard	Any Rating	Any Rating	Any Rating	<b>Zero</b>
Any Rating	Unsatisfactory	Any Rating	Any Rating	<b>Zero</b>
Any Rating	Any Rating	Unsatisfactory	Any Rating	<b>Zero</b>
Any Rating	Any Rating	Any Rating	Unsatisfactory	<b>Zero</b>

<b>Overall Self-Assessment Rating:</b>	
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## **Appendix B: Sample Letters and Resolutions**

The sample letters and resolutions included in this Appendix are intended for institutions to use as models in complying with the Federal Reserve's PSR policy. Each resolution submitted to a Reserve Bank should bear the corporate seal of the institution, provided that the institution has one. Institutions must renew their resolutions annually.

The de minimis cap resolution should be used by those institutions that did not conduct a self-assessment, but which require greater use of intraday credit than permitted under the exempt cap category. The self-assessment resolution is required for those institutions that have completed a self-assessment and intend to adopt an average, above average, or high cap category. In addition, the appropriate collateralized capacity resolution should be completed by institutions that have been approved by their Reserve Bank for collateralized daylight overdraft capacity above their net debit cap. These cap resolutions are discussed further in Section II of this manual.

In the resolution that is adopted by the board of directors, the words or phrases that appear in parentheses in the following sample resolutions should be replaced with appropriate text. In some cases, the options available are listed. When completing the self-assessment resolution, note the blank spaces shown to the left of the four components of the self-assessment and the overall assessment rating. The appropriate values for these spaces are to be selected from the following options:

<u>Assessment Component</u>	<u>Rating options</u>
Creditworthiness	Excellent Very Good Adequate Below Standard
Intraday Funds Management and Control	Strong Satisfactory Unsatisfactory
Customer Credit Policies and Controls	Strong Satisfactory Unsatisfactory
Operating Controls and Contingency Procedures	Satisfactory Unsatisfactory

Overall Assessment (Cap category)	High
	Above average
	Average
	Zero cap

The rating assigned must be supported by information in an institution's self-assessment file. For valid combinations of the ratings and the overall assessment, consult Section VI of this manual.

Model Resolution 1  
**De Minimis Cap**

I hereby certify that the following resolution was duly adopted at a meeting of the (Type of governing body/Board of directors) of the (Official name of institution) (the "Institution"), duly authorized and existing under the laws of (State/United States), which meeting was duly called and held on the \_\_\_ day of \_\_\_\_\_, 20\_\_, and that those resolutions are now in full force and effect and are not in conflict with any provisions in the certificate of incorporation, statutes, or bylaws of the Institution.

WHEREAS, the Board of Governors of the Federal Reserve System has announced a policy of reducing risks on payment systems that requires each depository institution that incurs daylight overdrafts in its Federal Reserve account to adopt a net debit cap category; and

WHEREAS, this Institution desires to comply with the Federal Reserve's policy; and

WHEREAS, the board of directors has this day met and considered the report submitted by management that addresses how the Institution plans to comply with the Federal Reserve's policy and that makes recommendations regarding a net debit cap category.

NOW, THEREFORE, be it resolved that the board of directors hereby adopts the *De minimis* cap as its net debit cap category.

RESOLVED, that these resolutions and all the powers and authorizations hereby granted or confirmed shall continue in full force and effect until written notice of their revocation shall have been given to and received by the Reserve Bank or for one year, whichever occurs earlier.

IN WITNESS HEREOF, I, the undersigned, (Cashier/Comptroller/Secretary) of the Institution, have hereunto subscribed my name and affixed the seal of the Institution.

(Signature of Secretary to the Board of Directors)

(Name of Depository Institution)

(Corporate Seal)

(Address)

(City, State, and Zip)

(Date)

(ABA Routing Number)

Model Resolution 2  
**Self-Assessment Cap**

I hereby certify that the following resolution was duly adopted at a meeting of the (Type of governing body/board of directors) of the (Official name of institution) (the "Institution"), duly authorized and existing under the laws of (State/United States), which meeting was duly called and held on the \_\_\_ day of \_\_\_\_\_, 20\_\_, and that those resolutions are now in full force and effect and are not in conflict with any provisions in the certificate of incorporation, statutes, or bylaws of the Institution.

WHEREAS, the Board of Governors of the Federal Reserve System has announced a policy of reducing risks on payment systems that requires each depository institution that incurs daylight overdrafts in its Federal Reserve account to adopt a net debit cap category; and

WHEREAS, this Institution desires to comply with the Federal Reserve's policy; and

WHEREAS, the board of directors has this day met and considered the report submitted by management that assesses the Institution's creditworthiness; intraday funds management and controls; customer credit policies and controls; and operating controls and contingency procedures; in accordance with the Federal Reserve's guidelines and that makes recommendations regarding self-assessment ratings, an overall self-assessment, a net debit cap category, and,

NOW, THEREFORE, be it resolved that the board of directors hereby adopts the following self-assessment ratings and daylight overdraft cap category:

Creditworthiness	_____
Intraday funds management and control	_____
Customer credit policies and controls	_____
Operating controls and contingency procedures	_____
Overall assessment	_____

Daylight overdraft cap category	<u>(High, Above average, Average)</u>
---------------------------------	---------------------------------------

RESOLVED, that these resolutions and all the powers and authorizations hereby granted or confirmed shall continue in full force and effect until written notice of their revocation shall have been given to and received by the Reserve Bank or for one year, whichever occurs earlier.

IN WITNESS HEREOF, I, the undersigned, (Cashier/Comptroller/Secretary) of the Institution, have hereunto subscribed my name and affixed the seal of the Institution.

\_\_\_\_\_  
(Signature of Secretary to the Board of Directors)

\_\_\_\_\_  
(Name of Depository Institution)

\_\_\_\_\_  
(Address)

(Corporate Seal)

\_\_\_\_\_  
(City, State, and Zip)

\_\_\_\_\_  
(ABA Routing Number)

Model Resolution 3a  
**Collateralized Capacity**

I hereby certify that the following resolution was duly adopted at a meeting of the (Type of governing body/Board of directors) of the (Official name of institution) (the "Institution"), duly authorized and existing under the laws of (State/United States), which meeting was duly called and held on the \_\_\_ day of \_\_\_\_\_, 20\_\_, and that those resolutions are now in full force and effect and are not in conflict with any provisions in the certificate of incorporation, statutes, or bylaws of the Institution.

WHEREAS, the Board of Governors of the Federal Reserve System has announced a policy of reducing risks on payment systems that allows a depository institution, under certain conditions, to pledge eligible collateral for the purposes of expanding intraday capacity beyond the net debit cap; and

WHEREAS, this Institution desires to expand its daylight overdraft capacity through the pledging of collateral; and

WHEREAS, the board of directors hereby has reviewed the request for collateralized capacity and has recommended that the Institution pledge collateral to support a maximum daylight overdraft capacity level of \$\_\_\_\_\_. The board of directors agree to pledge collateral in the amount of \$\_\_\_\_\_ for this purpose.

RESOLVED, that these resolutions and all the powers and authorizations hereby granted or confirmed shall continue in full force and effect until written notice of their revocation shall have been given to and received by the Reserve Bank or for one year, whichever occurs earlier.

IN WITNESS HEREOF, I, the undersigned, (Cashier/Comptroller/Secretary) of the Institution, have hereunto subscribed my name and affixed the seal of the Institution.

\_\_\_\_\_  
(Signature of Secretary to the Board of Directors)

\_\_\_\_\_  
(Name of Depository Institution)

(Corporate Seal)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City, State, and Zip)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(ABA Routing Number)

Model Resolution 3b  
**Collateralized Capacity**  
**Supplement for Securities in Transit**

I hereby certify that the following resolution was duly adopted at a meeting of the (Type of governing body/Board of directors) of the (Official name of institution) (the "Institution"), duly authorized and existing under the laws of (State/United States), which meeting was duly called and held on the \_\_\_ day of \_\_\_\_\_, 20\_\_, and that those resolutions are now in full force and effect and are not in conflict with any provisions in the certificate of incorporation, statutes, or bylaws of the Institution.

WHEREAS, the Board of Governors of the Federal Reserve System has announced a policy of reducing risks on payment systems that allows a depository institution, under certain conditions, to pledge eligible collateral for the purposes of expanding intraday capacity beyond the net debit cap; and

WHEREAS, this Institution desires to expand its daylight overdraft capacity through the pledging of securities in transit as defined in this resolution;<sup>39</sup> and

WHEREAS, the board of directors has this day met and considered the reasons and purpose for requesting additional daylight overdraft capacity. For these reasons and purposes, the board of directors agrees to pledge securities in transit in the approximate amount of \$\_\_\_\_\_, and, if applicable, to pledge other eligible collateral in the amount of \$\_\_\_\_\_. The board of directors recognizes that the amount of securities in transit available to be pledged to the Federal Reserve will fluctuate throughout a given day.

**NOW, THEREFORE, be it resolved that the board of directors hereby acknowledges that securities in transit used to collateralize daylight overdraft capacity will be consistent with the reasons and purposes as submitted to the administrative Reserve Bank and agreed upon by the board of directors this day.**

RESOLVED, that these resolutions and all the powers and authorizations hereby granted or confirmed shall continue in full force and effect until written notice of their revocation shall have been given to and received by the Reserve Bank or for one year, whichever occurs earlier.

IN WITNESS HEREOF, I, the undersigned, (Cashier/Comptroller/Secretary) of the Institution, have hereunto subscribed my name and affixed the seal of the Institution.

(Signature of Secretary to the Board of Directors)

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<sup>39</sup> The Reserve Banks may accept securities in transit on the Fedwire book-entry securities system as collateral to support an institution's maximum daylight overdraft capacity level. Securities in transit refer to book-entry securities transferred over the National Book-Entry System that have been purchased by a depository institution, but not yet paid for and owned by the institution's customers. The pledging of securities in transit requires the institution to keep records sufficient to demonstrate its continuing compliance with its obligations under the PSR policy. The institution shall supply bi-weekly reports to the Reserve Bank showing the values, at specified intervals, for the loan value of the aggregate amount of collateral pledged, the aggregate amount of the extensions of credit, and the amount of the Fedwire securities overdraft as reflected on its books.



\_\_\_\_\_  
(Name of Depository Institution)

(Corporate Seal)

\_\_\_\_\_  
(Address)

\_\_\_\_\_  
(City, State, and Zip)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(ABA Routing Number)

Model Letter 4  
**Nonbank and Industrial Bank Certification Letter**

Section 225.52(b)(2) of Federal Reserve Regulation Y prohibits nonbank banks and industrial banks from incurring an overdraft on behalf of, or by, an affiliate at a Federal Reserve Bank except under certain conditions. An affiliate is any company that controls an institution, is controlled by an institution, or under common control with an institution.

Because ( Official name of institution ) does not currently have any accounts for affiliates, I hereby certify that any overdrafts incurred by our institution would not be in violation of Section 225.52 of Regulation Y. I further certify that the Federal Reserve will be notified should the status regarding affiliate accounts change. This certification will be updated annually.

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Telephone Number)

Model Letter  
**Foreign Bank Family Cap Allocation Letter**

(Address to daylight overdraft contact at  
Administrative Reserve Bank)

This is to notify you that (Official name of institution) allocates a portion of its net debit cap of (U.S. dollar amount) to its branch(es) or agency(ies) in the Federal Reserve Districts listed below. No explicit allocation is made to the bank's office in this District, since it is our understanding that any part of our cap not allocated to offices in other Districts will automatically be allocated to our office in this District.

Federal Reserve District

Cap Allocation (US \$)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_  
(Authorized Signature)

\_\_\_\_\_  
(Name)

\_\_\_\_\_  
(Title)

\_\_\_\_\_  
(Telephone Number)

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## **Appendix C: Capital Measures**

This Appendix provides information, by type of depository institution, on capital measures used for daylight overdraft cap and fee calculation. In most cases, capital information is submitted to the primary regulator or supervisor using specific forms and reports, which are indicated below.

### 1. Most U.S. banks, including:

- U.S.-chartered commercial banks
- Nonbank banks
- Bankers' banks
- Industrial banks
- Federally insured mutual savings banks
- Federal savings banks
- FDIC-insured cooperative banks

Risk-based capital (i.e., Tier 1 and Tier 2 capital) for these institutions is calculated from data reported on the Federal Financial Institutions Examination Council (FFIEC) forms 031-034. For most banks, Tier 1 capital will equal common stockholders' equity capital less goodwill and other disallowed intangible assets and Tier 2 capital will equal the allowable portion of the allowance for loan and lease losses and is further limited to 100 percent of Tier 1 capital. Please refer to the instructions for FFIEC forms 031-034, Schedule RC-R for a discussion of Tier 1 and Tier 2 capital.

### 2. Certain savings institutions, including:

- Insured savings and loan associations
- Uninsured savings and loan associations that are on Savings Association Insurance Fund (SAIF) files
- SAIF-insured cooperative banks

Thrift Financial Report, Schedule CCR (Consolidated Capital Requirement):

**Total Risk-based Capital** (line 39).

### 3. Other savings institutions, including:

- Uninsured savings and loan associations that are not on Office of Thrift Supervision files
- Mutual savings banks (state or privately insured)

A Report of Condition is not filed by these institutions. Reserve Bank staff obtain capital information directly from these institutions for daylight overdraft cap calculation purposes.

4. Credit unions:

- Federally insured credit unions
- Credit unions not federally insured that are on National Credit Union Association (NCUA) files

NCUA Semiannual Financial Statistical Report (NCUA 5300/S):

**Regular reserves** (Acct. 931) +  
**Investment valuation reserve** (Acct. 668, 5300S only) +  
**Undivided earnings** (Acct. 940) +  
**Other reserves** (Acct. 658).

5. U.S. Branches and Agencies of Foreign Banks:

Annual Daylight Overdraft Capital Report for U.S. Branches and Agencies of Foreign Banks (FR 2225):

**Daylight overdraft capital base** (line 3)

or

Report of Assets and Liabilities for U.S. Branches and Agencies of Foreign Banks (FFIEC—002) Schedule RAL:

**Net due to related depository institutions** (Item 5.a., RCFD 2944).

See Section V for further information on capital measures for U.S. branches and agencies of foreign banks.

## Appendix D: Daylight Overdraft Transaction Posting Rules<sup>40</sup>

The following schedule shows the rules for posting transactions to Federal Reserve Accounts for the purpose of measuring daylight overdrafts.

### Opening Balance

=        *previous day's closing balance*

### Post Throughout Business Day:

- +/-     Fedwire funds transfers
- +/-     Fedwire book-entry securities transfers
- +/-     Net settlement entries.

### Post at 8:30 a.m. Eastern Time:

- +/-     Government and commercial ACH credit transactions<sup>41</sup>  
           *Both sides of the ACH credit transaction - the credit to the receiver and the debit to the originator - are posted simultaneously.*
- +        Treasury Electronic Federal Tax Payment System (EFTPS) investments from ACH credit transactions
- +        Advance-notice Treasury investments  
           *These include direct and special direct Treasury investments for which notification was given a day earlier.*
- +        Treasury checks, postal money orders, local Federal Reserve Bank checks, and EZ-Clear savings bond redemptions in separately sorted deposits  
           *These items must be deposited by 12:01 a.m. or later local time.*
- Penalty assessments for tax payments from the Treasury Investment Program (TIP).<sup>42</sup>

### Post at 8:30 a.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:

- +/-     Main Account Administrative Investment or Withdrawal from TIP
- +/-     SDI (Special Direct Investment) Administrative Investment or Withdrawal from TIP
- +        31 CFR Part 202 Account Deposits from TIP

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<sup>40</sup> This schedule of posting rules does not affect the overdraft restrictions and overdraft-measurement provisions for nonbank banks established by the Competitive Equality Banking Act of 1987 and the Board's Regulation Y (12 CFR 225.52).

<sup>41</sup> Depository institutions that are monitored in real time must fund the total amount of their commercial ACH credit originations when the transactions are processed. If the Federal Reserve receives commercial ACH credit transactions from depository institutions monitored in real time after the scheduled close of the Fedwire funds transfer system, these transactions will be processed when the Federal Reserve's Account Balance Monitoring System (ABMS) reopens, or by the ACH deposit deadline, whichever is earlier. The ABMS provides intraday account information to the Reserve Banks and depository institutions and is used primarily to give authorized Reserve Bank personnel a mechanism to control and monitor account activity for selected institutions. For more information on ACH transaction processing, refer to the ACH Settlement Day Finality Guide available through the Federal Reserve Financial Services website at <http://www.frb-services.org>.

<sup>42</sup> The Reserve Banks will identify and notify depository institutions with Treasury-authorized penalties on Thursdays. In the event that Thursday is a holiday, the Reserve Banks will identify and notify depository institutions with Treasury-authorized penalties on the following business day. Penalties will then be posted on the business day following notification.

- Uninvested PATAX Tax Deposits from TIP
- Main Account Balance Limit Withdrawals from TIP
- Collateral Deficiency Withdrawals from TIP
- 31 CFR Part 202 Deficiency Withdrawals from TIP.

**Post at 8:30 a.m., 1:00 p.m., and 6:30 p.m. Eastern Time:**

- Main Account Treasury Withdrawals from TIP.<sup>43</sup>

**Post by 9:15 a.m. Eastern Time:**

- + U.S. Treasury and government agency book-entry interest and redemption payments
- + U.S. Treasury and government agency matured coupons and definitive securities received before the maturity date.

**Post Beginning at 9:15 a.m. Eastern Time:**

- Original issues of Treasury securities.  
*Original issues of government agency securities are delivered as book-entry securities transfers and will be posted when the securities are delivered to the purchasing institutions.*

**Post at 9:30 a.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:**

- + FR-ETA Value Fedwire Investments from TIP.

**Post at 11:00 a.m. Eastern Time:**

- +/- ACH debit transactions  
*Both sides of the ACH debit transaction — the debit to the receiver and the credit to the originator — are posted simultaneously.*
- + EFTPS investments from ACH debit transactions.

**Post at 11:00 a.m. Eastern Time and Hourly Thereafter:**

- +/- Commercial check transactions, including returned checks<sup>44</sup>
- Check debits  
*Check debits are posted on the hour at least one hour after presentment. Checks presented before 10:01 a.m. ET will be posted at 11:00 a.m. ET. Presentment times will be based on surveys of endpoints' scheduled courier deliveries and so will occur at the same time each day for a particular institution.*
- + Check credits  
*Institutions must choose one of two check-credit posting options, (1) all credits posted at a single, float-weighted posting time, or (2) fractional credits posted throughout the day. The first option allows an institution to receive all of its check credits at a single time for each type of cash letter. This time may not necessarily fall on a clock hour. The*

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<sup>43</sup> On rare occasions, the Treasury may announce withdrawals in advance that are based on depository institutions' closing balances on the withdrawal date. The Federal Reserve will post these withdrawals after the close of Fedwire.

<sup>44</sup> Electronic check presentments will post at 11:00 a.m. ET and hourly thereafter until April 1, 2002.



*second option lets the institution receive a portion of its available check credits on the clock hours between 11 a.m. and 6 p.m. ET. The option selected applies to all of an institution's check deposits, including those for its respondents. Reserve Banks will calculate crediting fractions and float-weighted posting times for each time zone based on surveys. Credits for mixed cash letters and other Fed cash letters are posted using the crediting fractions or the float-weighted posting times for the time zone of the Reserve Bank servicing the depositing institution. For separately sorted deposits, credits are posted using the posting times for the time zone of the Reserve Bank servicing the payor institution.*

- +/- Check corrections amounting to \$1 million or more
- + Currency and coin deposits
- + Credit adjustments amounting to \$1 million or more.

**Post at 12:30 p.m. Eastern Time and Hourly, on the Half-Hour, Thereafter:**

- + Dynamic Investments from TIP.

**Post by 1:00 p.m. Eastern Time:**

- + Same-day Treasury investments.  
*These transactions represent direct and special direct Treasury investments for which notification is given on the same day.*

**Post at 1:00 p.m. Local Time and Hourly Thereafter:**

- Electronic check presentments.<sup>45</sup>

**Post at 5:00 p.m. Eastern Time:**

- + Treasury checks, postal money orders, and EZ-Clear savings bond redemptions in separately sorted deposits.  
*These items must be presented by 4:00 p.m. Eastern Time.*
- + Local Federal Reserve Bank checks.  
*These items must be presented before 3:00 p.m. Eastern Time.*
- +/- Same-day ACH transactions. These transactions include ACH return items, check-truncation items, and flexible settlement items.

**Post at 6:30 p.m. Eastern Time:<sup>46</sup>**

- + Penalty Abatements from TIP.

**Post After the Close of Fedwire Funds Transfer System:**

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<sup>45</sup> The Federal Reserve Banks will post debits to depository institutions' accounts for electronic check presentments made on or before 12:00 p.m. local time at 1:00 p.m. local time. The Reserve Banks will post presentments made after 12:00 p.m. local time on the next clock hour that is at least one hour after presentment takes place but no later than 3:00 p.m. local time.

<sup>46</sup> The Federal Reserve Banks will process and post Treasury-authorized penalty abatements on Thursdays. In the event that Thursday is a holiday, the Federal Reserve Banks will process and post Treasury-authorized penalty abatements on the following business day.

+/-     All other transactions.

*These transactions include the following: local Federal Reserve Bank checks presented after 3:00 p.m. eastern time but before 3:00 p.m. local time; noncash collection; credits for U.S. Treasury and government agency definitive security interest and redemption payments if the coupons or securities are received on or after the maturity date; currency and coin shipments; small-dollar credit adjustments; and all debit adjustments. Discount-window loans and repayments are normally posted after the close of Fedwire as well; however, in unusual circumstances a discount window loan may be posted earlier in the day with repayment 24 hours later, or a loan may be repaid before it would otherwise become due.*

=        **Closing Balance.**

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## GLOSSARY

**Above average cap**—The cap category that permits an institution to incur daylight overdrafts on a single day up to 1.875 times its capital measure and an average of its peak daily overdrafts during any two-week reserve maintenance period up to 1.125 times its capital measure.

**Account Balance Monitoring System (ABMS)**—The Federal Reserve’s computer system that provides account information to the Federal Reserve Banks and depository institutions on an intraday basis. ABMS serves as both an informational source and a monitoring tool. This information includes opening balances, funds and security transfers, non-wire accounting activity, and DI cap and collateral limits.

**ACH**—Automated clearing house. An electronic batch processing service used to disburse or collect funds.

**Administrative Reserve Bank**—The administrative Reserve Bank is responsible for the administration of Federal Reserve credit, reserves, and risk management policies for a given depository institution or other legal entity.

**Affiliate**—Any company that controls, is controlled by, or is under common control with, a bank or nonbank bank (according to Federal Reserve Regulation Y).

**Agreement corporation**—A corporate subsidiary of a federal- or state-chartered bank having an agreement or undertaking with the Board of Governors, under Section 25 of the Federal Reserve Act, to engage in international banking and investments.

**Average cap**—The cap category that permits an institution to incur daylight overdrafts on a single day up to 1.125 times its capital measure and an average of its peak daily overdrafts during any two-week reserve maintenance period up to 0.75 times its capital measure.

**Average daily daylight overdraft**—A institution’s average daily daylight overdraft is calculated by dividing the sum of its negative Federal Reserve account balances at the end of each minute of the scheduled Fedwire operating day (with positive balances set to zero) by the total number of minutes in the scheduled Fedwire operating day.

**Bankers’ bank**—An institution organized and chartered solely to do business with other banks, and primarily owned by the banks that it services. Bankers’ banks do not take deposits or make loans to the public, and are not eligible for discount window access unless they waive their exemption from reserve requirements.

**Basle Capital Accord**—A 1988 agreement by the Committee on Banking Regulations and Supervisory Practices of the Group of Ten Countries that establishes a framework for bank capital measurement and capital standards.

**Board-of-directors resolution**—A statement of intention to follow a course of action that is approved by a majority vote of a quorum of the board of directors of a corporation. In the context of the PSR policy, a board-of-directors' resolution would be adopted to convey approval to a Reserve Bank of a net debit cap category.

**Board of Governors (Board)**—The Board of Governors of the Federal Reserve System.

**Book-entry securities transfer**—Generally, an electronic transfer of a U.S. Treasury or Government Agency security over the Fedwire system.

**Cap**—See **Net debit cap**.

**Cap category**—An institution's category or class for purposes of determining its daylight overdraft net debit cap. There are six cap categories: Zero, Exempt-from-filing, *De minimis*, Average, Above average, and High.

**Cap multiple**—The factor associated with each cap category for purposes of calculating the net debit cap.

**Capital measure**—For depository institutions chartered in the United States, net debit caps are multiples of "qualifying" or similar capital measures that consist of those capital instruments that can be used to satisfy risk-based capital standards, as set forth in the capital adequacy guidelines of the federal financial regulatory agencies. The U.S. capital equivalency measure for branches and agencies of foreign banks is based on their strength of support assessment ranking and financial holding company status.

**Competitive Equality Banking Act (CEBA)**—A federal law enacted August 10, 1987, that, among other things, prohibits nonbank banks and certain industrial banks from incurring daylight overdrafts in their Federal Reserve accounts on behalf of affiliates.

**Daylight overdraft**—A negative balance in an institution's Federal Reserve account at any time during the Fedwire operating day.

Peak daily overdraft—The maximum end-of-minute negative account balance held by an institution on a particular day.

Two-week average overdraft—The sum of the peak daily overdrafts over a two-week reserve maintenance period divided by the number of business days in the period.

**Daylight Overdraft Reporting and Pricing System (DORPS)**—The computer system used by the Federal Reserve to measure and assess fees for daylight overdrafts in Federal Reserve accounts.

**Deductible**—A percent of an institution's capital that is used to determine the amount deducted from

the gross overdraft charge for a day.

***De minimis cap***—The cap category that permits an institution to incur daylight overdrafts up to a net debit cap equal to 40 percent of its capital.

**Edge Act Corporation**—A corporate subsidiary of a domestic or foreign bank, established under section 25(a) of the Federal Reserve Act to engage in international banking and investments.

**Effective daily rate**—The annual rate charged for daylight overdrafts divided by 360 days, adjusted for the portion of the day during which the Fedwire funds transfer system is officially operating.

**End-of-minute balance**—The balance in an institution's Federal Reserve account at the end of each minute as measured by DORPS for purposes of daylight overdraft reporting and pricing.

**Exempt-from-filing cap**—The cap category that permits an institution to incur daylight overdrafts up to a cap equal to the lesser of \$10 million or 20 percent of its capital.

**Fedwire**—The Federal Reserve funds and book-entry government securities transfer system.

**Float-weighted posting time**—The float-neutral time at which check credits are posted for separately sorted cash letters containing checks drawn on a particular time zone or for mixed and other Fed cash letters deposited in a particular time zone. Float-weighted posting times are determined by Reserve Banks based on surveys of check presentment times and apply only to those institutions choosing the float-weighted posting time option for their check credits.

**Fractional posting times**—The clock hours from 11:00 a.m. through 6:00 p.m. Eastern time, when a portion of check credits are posted for separately sorted cash letters drawn on a particular time zone or for mixed and other Fed cash letters deposited in a particular time zone. The percentage of check credits, by cash letter type, for each hour is determined by Reserve Banks based on surveys of check presentment times, and applies only to those institutions choosing the fractional posting time option for their check credits.

**Gross overdraft charge**—The daylight overdraft charge calculated, based on average overdrafts, before being reduced by the deductible valued at the effective daily rate charged for overdrafts.

**High cap**—The cap category that permits an institution to incur daylight overdrafts on a single day up to 2.25 times its capital measure and an average of its peak daily overdrafts during any two-week reserve maintenance period up to 1.5 times its capital measure.

**Industrial bank**—An institution as defined in section 2(c)(2)(H) of the Bank Holding Company Act. In general, an industrial bank is a state-chartered finance company that makes loans and raises funds by selling investment certificates or investment shares to the public.

**Liquidity**—The ability to make payments as they become due in readily available funds.

**Maximum daylight overdraft capacity**—An institution's net debit cap plus Reserve Bank-approved collateralized credit. Only institutions with self-assessed net debit caps are eligible for maximum daylight overdraft capacity.

**Net debit cap**—The maximum dollar amount of daylight overdrafts an institution is permitted to incur in its Federal Reserve account at any point in the day, or on average over a two-week period. The net debit cap is generally equal to an institution's capital times the cap multiple for its cap category.

**Net debit position** —A negative intraday or interday balance in an account or a negative position with an institution's counterparties in a private clearing and settlement arrangement.

**Nonbank bank**—In general, an institution that accepts deposits or makes commercial loans, but does not engage in both activities. Any institution that became a bank as a result of the enactment of CEBA and was not controlled by a bank holding company on the day before the CEBA enactment.

**Overnight overdraft**—A negative position in a Federal Reserve account at the Reserve Bank's close of business. Overnight overdrafts are subject to a penalty fee.

**Posting rules**—A schedule used for determining the timing of debits and credits to an institution's Federal Reserve account for various transactions processed by the Reserve Banks.

**PSR Policy**—The Federal Reserve's Payments System Risk policy.

**Real-time monitoring**—The ABMS function that provides the ability to monitor an institution's Federal Reserve account balance as transactions occur throughout the day and to reject or intercept outgoing funds transfers when they would cause an overdraft in an institution's Federal Reserve account.

**Reserve maintenance period**—A two-week period beginning on a Thursday and ending on a Wednesday over which most depository institutions must maintain required reserves and over which daylight overdrafts are monitored and charges may be assessed.

**Risk-based capital**—The “qualifying” or similar capital measure used to satisfy risk-based capital standards, as set forth in the capital adequacy guidelines of the federal financial regulatory agencies.

**Self-assessment**—A process by which a depository institution assesses its creditworthiness, intraday funds management, operational controls, contingency procedures, and credit policies in order to determine its appropriate cap category for daylight overdraft purposes.

**Self-assessed cap**—One of three cap categories for which institutions are required to complete a self-assessment. The self-assessment cap categories are average, above average, or high.

**Systemic risk**—In the context of payment systems, the risk that liquidity or payment problems at one financial institution will be transmitted to other institutions.

**U.S. capital equivalency**—Capital measure applied to U.S. branches and agencies of foreign banks for purposes of calculating net debit caps and the deductible used to calculate daylight overdraft charges.

**Zero cap**—The cap category associated with a cap multiple of zero and resulting in a net debit cap of zero. A depository institution may voluntarily adopt this cap category, or a Reserve Bank may assign a zero cap to certain institutions.